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OBSERVATIONS

ON THE

JAIL, HOSPITAL, OR SHIP

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BY ROBERT ROBERTSON, M.D.

A SURGEON OF HIS MAJESTY'S NAVY.

OPINIONUM COMMENTA DELET DIES; EXPERIENTIÆ JUDICIA CONFIRMAT.

LONDON MEDICAL SOCIETY

LONDON:
PRINTED FOR J. MURRAY, IN FLEET-STREET.
MDCCLXXXIII.

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A SURGEON OF HIS MAJESTY'S NAVY.

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MDCCLXXXIII.

TO

WILLIAM HUNTER, M.D.

Phyſician Extraordinary to Her Majeſty,

Profeſſor of Anatomy to the Royal Academy,

Member of the Royal and Antiquarian Societies,

AND

Member of the Royal Academy of Sciences.

SIR,

IMPRESSED with the higheſt reſpect for your talents and character, many reaſons induce me to dedicate theſe Obſervations to you:—to enumerate them might diſpleaſe you.

Permit me, only, to requeſt the protection which all improvements, in the Medical department of the Royal Navy, naturally claim from You, ſince that attentive ſpirit of enquiry, which now prevails among the Navy ſurgeons, was firſt excited by the precepts you inculcated, in the lectures you delivered before them, at an early period of that career which you have ſince purſued, with ſo much

honour

honour to yourſelf, and ſuch ſignal advantage to mankind.

Be pleaſed, alſo, to accept my moſt grateful acknowledgements, for the many favours you have condeſcended to confer on me.

I am, SIR,

Your much obliged,

Moſt obedient, and

Moſt humble Servant,

ROBERT ROBERTSON.

Kingſton, Portſmouth,
May 17, 1782.

PREFACE.

IMPORTANT as the facts are which we have ſtated in the following Obſervations, they will not, I fear, in the opinion of ſome readers, be thought conducive to the improvement of Medicine; and there are others, by whom Diaries and Reviews of Sick Liſts, and of the Weather, are conſidered not only as dry and inſipid reading, but altogether uſeleſs in the Practice of Phyſic. I muſt beg leave to inform thoſe gentlemen, that the Obſervations were collected and publiſhed to ſerve mankind in general, and the Navy in particular; and for the information of ſuch readers as think no circumſtance trivial, which leads to ſo deſirable an object: nor their time ill ſpent, when employed in extricating themſelves out of the mazes of prejudice, and intricacies of miſleading theories, thro' which experience only can direct us on our way to truth. Without that, we muſt continue implicitly to follow the ſteps of thoſe who have

gone before us, by ſervilely adopting their maxims and practices, which, in many inſtances, were founded on ill-grounded theory; and thus end our days, without having once dared to think for ourſelves, or to benefit ſociety.

Let thoſe, however, who diſlike the firſt part of the Obſervations, paſs over to the ſecond, in the peruſal of which, *curioſity* may ſometimes, perhaps, excite them to recur to thoſe paſſages of the former that are alluded to.

To render the ſubject as clear as it is important, has been my ſtudy; and ſhould I, unfortunately, be thought to have failed in attaining this end, I hope it will be generouſly imputed to the nature of the ſubject, and the great difficulty of performing it—a taſk ſufficiently arduous for the ableſt writer.

The Obſervations are arranged ſomewhat differently from the Phyſical Journal, and I have not deſcribed any other diſeaſe than the fever. An Introduction was thought neceſſary to precede the Reviews and Diary, which make the firſt part; and the Deſcription of the Fever, with the various ways in which we were obliged

liged to treat it, and ſome tables, that I hope will be agreeable, if not uſeful to the reader, fill up the ſecond.

Without comparative views of different practices, the ſucceſsful never can be diſtinguiſhed from the unſucceſsful:—But when thoſe are minutely and faithfully ſtated, no room is left for diſputing which ought to be preferred.—Whoever is in poſſeſſion of thoſe advantages, and will not profit by them, muſt be obdurate indeed.

Many proofs of the doctrine advanced in the courſe of the Obſervations, which I have fortunately collected in a very extenſive practice, ſince theſe were near ready for the preſs, obliged me to add a Third Part, that I truſt will require no apology for giving the reader a little further trouble. Mine, which has been far greater, will be ſufficiently compenſated, ſhould they happily impreſs the mind with conviction of their importance.

The characters made uſe of in the Meteorological Obſervations, are as follow:

CHARACTERS.

—, denotes a calm; ⁎. light airs; ⁎⁎, freſh breezes; ⁎⁎⁎, gales; ⁎⁎⁎⁎, ſtrong gales; *v* variable; *f t b*, from, to, by, *viz. from* NW *to* SW *by* S; *p*, full, and *n*, new moon; *c*, clear; *cl*, cloudy; *ch*, changeable; *h*, hazy; *f*, foggy; o, light ſhowers; o o, ſhowers; o o o, hard ſhowers; o o o o, heavy rain; *d*, dew; *h*, hail; *ſ*, ſnow; *t*, thunder; *l*, lightning; *f*, froſt.

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INTRO-

INTRODUCTION.

IT is the opinion of ſome gentlemen, who have read my Phyſical Journal, that the limits, within which it was kept, are too confined to render it an object of general attention, or uſe—How far this opinion is well or ill founded, time will ſhew—Should mankind be diſpoſed to treat it harſhly, all that I might urge in its favour would fail to recommend it—But when the extent of an African and Weſt India voyage, and how frequently this was performed, are duly conſidered; when the great affinity of the diſeaſes of all hot climates, which comprehend no trivial ſpace; and when the little difference which probably can be requiſite in the treatment of ſuch diſeaſes are well

attended to, I imagine this opinion will loſe much of its force, as well in ſpeculation, as in practice—more eſpecially ſhould the dea of the great ſimilarity there is in all fevers (not ariſing from local inflammation) which is fortunately begun to be received by ſome of the moſt eminent phyſicians, be generally adopted.† Certain I am, that all the obſervations that I have hitherto made of fevers, afford the ſtrongeſt teſtimony to prove this doctrine, as may be ſeen by comparing the fevers deſcribed in the Phyſical Journal, with the deſcription of the ſhip fever, in the following Obſervations. ‡ Doctor Millar advances much in favour of the Journal when he aſſerts, that bark will cure *all the ideal variety of fevers*, and thinks a comparative view of the methods of the management of the African and Weſt Indian fever, with the treatment

† See Dr. Lind's new edition on fevers and infection, cap. 2. ſect. 2. p. 264, 265. and Dr. Millar's obſervations of the prevailing diſeaſes in GreatBritain, particularly in the army and navy; together with a review of that of other countries, and arithmetical calculations of the comparative ſucceſs of different methods of cure.

‡ Part 1. chap. 1. ſect. 1.

of

of the ſhip fever, and the different ſucceſs of thoſe methods, *as ſtated with fidelity in our Obſervations on this fever*, confirm his doctrine.

Be the fate of the Journal as it may, ſuch objections are not applicable to theſe Obſervations on the ſhip fever, or infection; an evil confined to no particular country or climate, but extending its fatal effects as far as we have either ſociety or commerce—An evil wherein the intereſts of mankind are involved. —He therefore who labours to promulgate this fact, to detect the public evil under all its inſidious appearances, and to render it leſs deſtructive than it has too often proved hitherto, is, at leaſt, a well-wiſher to ſociety.

In ſtating thoſe Obſervations I have not formed or advanced any hypotheſis reſpecting infection, but from experience have endeavoured to eſtabliſh ſome poſitions which, if attended to, may be uſeful in guarding againſt, and checking that enormous ſource of diſeaſes and death, as well as in curing the ſhip fever.—A cloſe attention to the fever for

about two years on board of his Majeſty's late ſhip the Juno, employed in America; † viſitations of hoſpital, and other ſhips; beſides private practice, have furniſhed me with this experience.—And nothing can be more evident to me, than that the fever was every where eſſentially the ſame—the difference of the ſymptoms ariſing merely from the conſtitution of the patient; from the accidental ſtate of the body when it was infected; from the various circumſtances they unavoidably then lived under, more eſpecially the climate and ſeaſon; or from the different methods in which they were treated.

The poſitions which I endeavour to eſtabliſh are,

Firſt, That fevers are often infectious on board of ſhips, and likewiſe on ſhore, when there is no ſuſpicion of infection—from whence great miſchief ariſes to ſociety.

Second, That the ſhip fever may be detected by duly attending to the following Ob-

† And on board of the Edgar two years.

ſervations

ſervations in general, and more particularly by thoſe ſymptoms which we have termed diagnoſtic; and the deſcription in part 2. chap. 1. ſect. 1.

Third, That Peruvian bark far excels all other remedies, hitherto extolled for curing this fever.

Whoever attempts to introduce the leaſt innovation into the practice of a ſcience profeſſed and practiſed by men who, from their indefatigable ſtudies to ſerve mankind, have become eminent, muſt reflect that he will require a ſeries of well grounded facts, if not demonſtration to ſupport him.—Should he be a young practitioner who deſigns the innovation, it will become him to act with good manners, and with deference to authority ſtamped with the public ſanction: unleſs ſuch authority can be proved to be contradictory to experience—the only teſt to be regarded in the practice of phyſic. Knowing therefore, that in a work of ſuch importance, hear-ſay evidence, or an *ipſe dixit* will have little weight, I have, as far as it was practicable, introduced arithmetical calculations; and where

thoſe

thoſe could have no place, I have confined myſelf to a plain relation of facts.

But before we proceed, it is neceſſary to inform the reader, that *infection*, throughout the following Obſervations, applies to the jail, the hoſpital, and the ſhip fever only—and as we are well convinced that theſe eſſentially are one and the ſame fever, and are cured by the ſame remedy, bark, we ſhall uſe the term *ſhip fever* only.

The firſt poſition which I ſhall endeavour to eſtabliſh, is, That fevers are often infectious on board of ſhips, and likewiſe on ſhore when there is no ſuſpicion of infection—from whence great miſchief ariſes to ſociety.

Infectious diſeaſes have in all countries, and in all ages, been the greateſt peſt with which mankind were ever viſited—and the ſhip fever alone has heretofore been more fatal to the fleets and armies of this country, particularly in time of war, from obvious reaſons, than the ſword, and all other diſeaſes whatever—during the calamity of war, we are tolerably well informed of the numbers

ſlain

ſlain and wounded; but, from political motives I ſuppoſe, we hear nothing of the thouſands who die of the ſhip fever, or other diſeaſes. I am of opinion however, that it would be far more beneficial to mankind to have an exact regiſter publiſhed of all the ſeamen and ſoldiers who die in the ſervice of this country, whether in times of war or peace —ſetting forth the diſeaſes of which they died, together with a conciſe, but faithful account of the manner in which they were treated by the phyſicians or ſurgeons—a ſcheme that might perhaps be eaſily extended to civil ſociety, by which the diligent and judicious practitioners would ſoon be diſtinguiſhed from the obſtinate or indolent theoriſts—The ignorant would be detected and taught to improve, or be compelled by the magiſtrate to withdraw from the practice of a ſcience, for which they were viſibly unqualified; while thoſe, who by an unwearied attention to diſeaſes, and the effects of remedies, modeſtly deſplayed their ſkill and judgment, would receive the tribute of a grateful people: the young phyſician or ſurgeon would not then dare to ſet out in practice on any theoretick authority whatever; but would be obliged

obliged to make that method the rule of his practice, which had hitherto been found by experience to be the moſt ſucceſsful—a laudable ſpirit of emulation to excel in the practice of phyſick would univerſally prevail, inſtead of an ambition to eſtabliſh ſuch theories as are now forced upon us—in God's name let mere theory be expelled from the practice of a ſcience, upon the ſucceſs of which the intereſt and lives of mankind depend.

The obvious conſequences of the ſhip fever not being ſuſpected to be contagious, when it is making great devaſtation in a fleet, will be a neglect of precautions to prevent the infection from ſpreading, and checking it in the bud.

On the 26th of November 1776,* ſixty ſupernumeraries were ſent from the Rainbow on board of the Juno, after the convaleſcents of the latter had been ſent on ſhore to ſick quarters; and great pains had been taken to ſweeten the ſhip by waſhing, good fires and ſmoking. Eight of theſe Rainbows complained to

* See the diary of the ſick liſt.

me

me as ſoon as they came on board, whom I found had the fever; and upon repreſenting the fact to captain Dalrymple, he immediately got an order to return them on board the Rainbow, which was done next morning. The ſurgeon of the Rainbow, who was a gentleman of good ſenſe, did not ſuſpect that any other thing was the matter with them, or the reſt of the ſupernumeraries which they had on board, but colds—and I have ſince been been well informed, that the Rainbow's people were ſickly ſoon after.

On the 1ſt of March 1778, when the Haerlem came into Cape Cod bay with the tranſports, I was ſent on board to viſit the lieutenant commanding her, who was reported ſick to captain Dalrymple: I found him, the ſurgeon, two midſhipmen, the lieutenant's clerk, and three or four men and a boy, very ill of fevers. The ſurgeon, ſo far from ſuſpecting that the fever proceeded from infection, was much ſurpriſed when I aſked where, or by what means they caught it; and on my enquiring if they had had any ſick paſſengers, or priſoners on board, the lieutenant told me that he received a few priſoners on board from the pri-

ſon ſhip at Rhode iſland before he ſailed, who were not well, to bring home to the Vineyard, as an inducement to the inhabitants to allow ſome of their pilots to come on board to pilot the tranſports through the ſhoals. Thus I traced the infection back to the priſon ſhip, at Rhode iſland, where I knew it had been very virulent and fatal for a conſiderable time.

The Haerlem being immediately ordered on a particular ſervice, the lieutenant and the reſt of the ſick were removed on board of a tranſport, and the ſurgeon of the Cerberus was directed to take care of them, except the lieutenant, who wiſhed I might viſit him as I had ſeen him firſt. I endeavoured ſeveral days to perſuade the ſurgeon of the Cerberus, that it was the ſhip fever of which thoſe men were ill; but he would not believe me until I aſked him if he had not perceived petechiæ on them; and he told me he had not looked for any, but that he would go and examine ſome of them immediately; and returning ſoon, he exclaimed, that it was the true *Febris Carceraria*; and could now account for his mate's being ill who attended them, and for ſome

ſome ſlight complaint of his own, and immediately preſcribed bark.

The agent for the tranſports frequently viſited on board the Haerlem, between Rhode Iſland and Cape Cod, and carried his ſervant (a boy) with him; the boy by that means caught the infection and died, without his maſter, or any one on board the tranſport ſuſpecting the cauſe. The agent himſelf was ſeized with the fever, and was very ill under my care.

When commanders neither know the conſequence of admitting ſick on board their ſhips, nor will pay any regard to their ſurgeons, when they diſſuade them from receiving them, obſtinacy is a mild appellation for their conduct. I belonged to a ſhip in a very healthy ſtation, on board of which a man, ill of a fever (who died in a few days) was admitted out of compaſſion, much againſt my inclination and advice; the conſequence of admitting him was, our ſhip immediately became ſickly, and continued ſo all the time I belonged to her; and I have been in-

informed by the ſurgeon who ſucceeded me, that her men were ſickly while ſhe continued in commiſſion, which was more than a year after I left her.

Such too frequently have been the conſequence of fevers, when not conſidered as infectious. When the fever has been raging with great violence on board different ſhips, I have heard their reſpective ſurgeons ſay, that there was a bad, ſlow, inflammatory, an irregular or putrid fever running through their ſhips; even theſe gentlemen never once ſuppoſed, nor would believe it when they were told, that the fever was infectious. It is therefore the leſs ſurprizing, that ſuch gentlemen can give no ſatisfactory reaſon why ſome ſhips are very ſickly, while others upon the ſame ſervice, and labouring under the ſame hardſhips, reſpecting duty, proviſions and cloaths, are perfectly healthy.—This was remarkably evident on board the ſhips employed in America; for ſuch of them as happened to be ſo unfortunate as to get priſoners on board, either from priſons, or priſon-ſhips, how healthy ſoever they were before, were ſure

to

to become ſickly. * Nor did any of the tranſports who had ſick troops on board, eſcape the infection. Yet notwithſtanding ſo many glaring proofs of *infection*, *that idea* was entertained on board of very few ſhips indeed.

I viſited ſome men on board of a tranſport at Sandy Hook, whom I found very ill of the ſhip-fever; and upon enquiry of the maſter, who was then, and had been long ill himſelf of the fever, I was informed that both he and his men had been very healthy until ſick troops came on board, and that they had never been healthy afterwards.

Were I to recapitulate all the inſtances which I could adduce on this ſubject, it would enlarge the bulk of theſe Obſervations beyond my deſign. I ſhall therefore only add two more, one of which I met with in private practice, and the other at Brookline Hoſpital on Long Iſland, near New York.

* Viz. Eagle, Diamond, Lark, Juno, Brune, Orpheus, Emerald, Apollo, Unicorn, and many others.

I was

I was desired by a friend, an officer of the navy, then in London, to visit his servant, a young man who had lately come from sea with him; he was bad, and had an apothecary attending him——I found him very ill of the ship fever. I enquired of the nurse what the apothecary said of him, and she told me that he thought it was only cold he had got, and that he would be well in a few days. The medicine which he prescribed, apparently, was saline mixture, with perhaps, some antimonial preparation. I desired the nurse to tell the gentleman, that I would meet him next morning; but unluckily he got before me, and told the nurse, who delivered the message I left, that he could not possibly wait for me, but that he had the pleasure to inform me by her, the patient was much better, after having *sweated* all night, and that he would soon be well. On the contrary, I found him worse; and suspecting from his appearance, that he had been more delirious in the night, than on any preceding night, I asked the nurse if he had not raved for some nights past: "To be sure," she said, "he had talked nonsense for several nights past, but he talked more last night

night than he ever did before." I adviſed his maſter to get him immediately into an hoſpital, which he did; and there he recovored, with great difficulty, by an abſceſs forming on his hip, as the boy himſelf told me ſome months after; and he was then ſo much emaciated, that I ſcarce knew him.——He could not recollect that I had ever ſeen him during his illneſs.

When the Juno arrived at New York, on the firſt of January, 1777, judging it my duty, I reported on the ſick liſt, (which was to be delivered to the commander in chief) that we had an infectious fever on board. The phyſician of the hoſpital being informed of this, prepared to receive fifteen men, who, 'tis true, were chiefly in a convaleſcent ſtate; and they were ſent next day.* The change of diet and air, which they took care to enjoy by ſtroiling about, had ſo happy an effect on many of them, that when I went to the hoſpital, the phyſician told me, he was ſurprized that I could report an

* More were ſent afterwards, as will appear in the Diary.

an infectious fever being on board the Juno, when there was nothing the matter with the men whom I had ſent on ſhore; and if Lord Howe ſhould be informed of it, he was certain that he would at leaſt be highly diſpleaſed. In conſequence of his inattention, four of thoſe fifteen men, who, as he imagined, ailed nothing, died; and others, who were ſent afterwards, from want of proper attendance, run delirious about the hoſpital in the night. What the further conſequences of ſuch inattention was, or might have been in the hoſpital, the reader will readily conjecture.

Thoſe *unſuſpected inſtances* of infection, are not introduced from any deſire to cenſure the character and memory of a reſpectable gentleman, far leſs to enjoy a triumph by expoſing the errors of others——The deſign is, to put young practitioners on their guard, and, if poſſible, to prevent the fatal effects of ſuch a general inattention hereafter.

And I hope it will be admitted, that however great the reſpect we owe to the merits

and

and characters of individuals, the regard which is due to the intereſt of ſociety is ſtill far greater. Theſe conſiderations, I am hopeful, will ſhelter me from cenſure, for ſtating important facts, for the publick intereſt. No other motive has induced me to undertake this ſecond laborious and unprofitable taſk—a taſk, however, which I may venture to ſay, the young and unexperienced practitioners who have come lately, and are daily entering into the ſervice, will particularly profit by, if they condeſcend to pay due attention to it; and as to the opinion of the more experienced gentlemen of the profeſſion, whoſe candour and generoſity I have already experienced, in their approbation of my Phyſical Journal, it is reſpectfully ſubmitted.—But to return to the ſubject.

Certain it is, that the ſhip fever appears ſo inſidiouſly at times, that men of great phyſical knowledge have miſtaken it for very ſlight complaints, and have thus been led to ſuppoſe that the ſick liſts, on board of ſhips where the fever was, were deſignedly increaſed, by adding the ſkulkers *, and thoſe who

* Men who get out of the way when work is carrying on, or make idle complaints to the ſurgeon, to be protected from doing duty.

had very trifling ailments, at a time when many of thoſe men who were thought to have very ſlight complaints, were ſo ill that they died of it ſoon after. Gentlemen who are employed to examine the ſick on board the ſhips, or on ſhore, ought therefore to be on their guard, and to execute ſuch an important duty without any prepoſſeſſion or bias whatever, and with that impartiality and benevolence, which diſtinguiſh the man of ſkill, candour and feeling.

Having now endeavoured to prove the firſt poſition, it will not perhaps be thought foreign to the purpoſe, to enquire into the cauſes why ſuch a general defect has exiſted ſo long in the practice of phyſick, as we have ſhown.

1ſt. They who viſit or attend fever-patients, know not that they were infected, only becauſe they have not taken the trouble to advert or enquire by what means their patients were infected. It is the leſs ſurpriſing, therefore, when other gentlemen who have taken the trouble to trace the diſeaſe to its ſource, and inform them of it, that many of

of them anſwer to the following purpoſe: "Infection, the devil! how ſhould we get infection? This is a fever of the inflammatory kind, but accompanied with malignancy and putridity, with very little or no remiſſion."

2d. Many of the profeſſion think, that by infection, is neceſſarily implied, a diſeaſe ſo deleterious in its nature, that, like the peſtilence of Athens, it ought to ſweep away ſuddenly almoſt every perſon whom it attacks; or that no other diſeaſes are infectious, except the meazles, ſmall pox, and plague. But attention to the ſhip fever will convince them of thoſe errors. The plague is univerſally thought the moſt dreadful and deſtructive of all diſeaſes; but by what appellation are we to diſtinguiſh a diſeaſe whereof about ſixty men die * in a very few weeks, on board of a ſhip, which ſhip's full compliment is two hundred and forty, widows * men included?

* This happened on board the Venus.

* A certain number bore for wages, which are appropriated to the fund to penſion widows, on board of every ſhip in the navy.

3d. Scepticiſm, I am of opinion, has been as baneful in the practice of phyſick as in any of the other ſciences; I would not, however, have it underſtood that I condemn gentlemen as ſcepticks for not implicitly believing the *ipſe dixit* of any perſon; but they may deſervedly be called ſo who pay no regard to the opinion or writings of them who have had opportunities of be coming acquainted with the diſeaſes in queſtion, and have been ſucceſsful in the management of them.

Of thoſe ſcepticks there are various claſſes—ſome men are become ſo, from having with great trouble framed their own darling hypotheſis, which, as if one of their offspring, they are determined to defend and ſupport at all hazards; or, what is equally as bad, they may have already adopted the opinion, and pinned their phyſical faith on the ſleeve of ſome author or practitioner, whom they think the only Eſculapius to be conſulted in all diſeaſes whatever. "Would you," ſay they, "preſume to deviate in your opinion or practice from the great Dr. ———? though at the ſame time, the perſon thus reprobated, has probably had far more experience in the diſeaſes under

der conſideration, than the Eſculapius himſelf; and this very Eſculapius, after the truth is known, has perhaps in that inſtance rendered himſelf eminent by having communicated to print what with indefatiguable ſtudy he had only ſpun out and wove in his own prolific brain—a moſt elegant inexplicable theory of the diſeaſes, in the texture of which, to be ſure, 'tis impoſſible he could have erred, or in the ſuitable rules which he has laid down for the cure!

There are other men whom it may not ſuit to confeſs that they are convinced; their ſituation and inclination may have already obliged them to have made up and publiſhed their opinion of the diſeaſes, and how erroneous ſo ever their opinion was, demonſtration itſelf would often, I fear, come too late for them to acknowledge their conviction.

There is yet another claſs of men leſs pardonable than any of the former, becauſe tho' by their ſituation they have had the power to do good, they have for particular ends, beſt known to themſelves, exerted it to intimidate, nay even to injure and oppreſs thoſe who

who have had virtue and reſolution to advance a doctrine contrary to the received opinion, an opinion which theory alone gave birth to, and which weakneſs and indolence have foſtered. Of ſuch men, I cannot help ſaying what the patriarch ſaid of old, "My ſoul come not thou into their ſecret, unto their aſſembly mine honour be not thou united!" * We now proceed to endeavour to eſtabliſh

The ſecond poſition, namely, That the ſhip fever may be detected by duly attending to the following obſervations in general, and more particularly by thoſe ſymptoms which we have termed diagnoſtic and the deſcription in part II. chap. I. ſect. I.

It is already admitted that the ſhip fever has ſometimes been ſo inſidious as to deceive men of great ſkill; but we are of opinion that this will very ſeldom happen if the following circumſtances and ſymptoms be carefully attended to.

1ſt. Let it be a rule when one, two, or more patients complain of a fever, to interro-

* Geneſis, chap. ver.

gate

gate them very ſtrictly—whether the ſymptoms be more or leſs ſevere matters not, the precaution is equally neceſſary; examine them cloſely if they have been in a place where there were people ſick, or in company with any people who had been viſiting, or attending ſick: ſhould your patient anſwer in the affirmative there will be great reaſon to ſuſpect that they have been infected, and ſuitable methods to ſtifle it in embryo, or to render it as mild as poſſible, cannot be too ſpeedily adopted: though they anſwer in the negative, the ſymptoms are to be the more diligently conſidered.

2d. Of all the ſymptoms of the ſhip fever taken ſeparately, the countenance is by far the moſt ſtriking index, or diagnoſtick, which daily becomes more and more obvious; and the more obvious, or the more diſeaſed, *it* is, the greater is the danger †. In *it* there is *ſomething* a *je ne ſais quoi* which expreſſes more diſeaſe than either the patient complains of, or can be conveyed in words.—To ſay that

* Dr. Lind is of the ſame opinion. See his Diſſertation on Fevers and Infection, chap. I. ſect. I. p. 193—*a note.*

the countenance is greatly dejected or depreſſed is not enough—much more is viſible to a perſon who carefully examines it; at leaſt much more is very obvious to any one who is acquainted with the fever. *It* therefore ought to be well ſtudied.

3d. Rigors, or chillineſs, or alternate chills and heats, almoſt conſtantly precede the fever.

4th. Very few patients complain without mentioning head-ach.

5th. Sickneſs at ſtomach, or reaching are very early complained of.

6th. Univerſal pains; or as the ſick expreſs themſelves, pains all over them,—or pains in all their bones or joints, but eſpecially in the loins or back are concomitants of the fever. Thoſe are the ſymptoms which the ſick firſt complain of. It is true I might mention others which often accompany the fever from its commencement, but they are not uniformly primitive ſymptoms, like the preceding—therefore, whenever the people on board

of

of a ſhip begin to fall down, and complain of having been ſeized with Rigor; or Chillineſs; or alternate Chills and Heats;—Headach;—Sickneſs at Stomach or Retching;—univerſal Pains—or, as they ſay, Pains all over them—or Pains in all their Bones, or Joints; but eſpecially in their Loins or Backs;—and if the countenance is at the ſame time diſeaſed, whatever be the other ſymptoms accompanying thoſe, I would not heſitate a moment to aſſert that a moſt virulent infection had got amongſt them.

If it be further obſervable in the courſe of the fever, that they who attend, or have communication with the ſick, are ſeized with ſimilar ſymptoms;—and if the ſick, though now arrived at a convaleſcent ſtate, are not only very long in recovering perfectly; but from the ſlighteſt cauſe are found liable to relapſe—they muſt have very little diſcernment who doubt of there being a moſt virulent infection on board.

But it may be ſaid that thoſe ſymptoms which I have laid down as the diagnoſticks of the ſhip-fever, are perfectly ſimilar to thoſe

which introduce the eruptive fever of the ſmall-pox and meaſles*—the ſtate of the countenance excepted. Were this the general opinion of practitioners, it would fully anſwer my preſent purpoſe;—as thoſe ſymptoms would be acknowledged to be the concomitants of infectious diſeaſes; and as ſurgeons when they are once aware that there is infection on board, will not only be ſoon relieved of their doubts, ſhould they have any, whether it is not the ſmall-pox or meaſles; but will be inſtructed to exert themſelves to render the infection as mild as circumſtances will admit † — nothing elſe being our preſent intention.

However, it is not to be underſtood that the picture of the ſhip-fever on its firſt attack, which is here laid before the reader, comprehends every feature which it puts on,—I ſay

* This is not ſtrictly the Caſe.

† For directions on this important ſubject, we refer the reader to Dr. Lind's valuable Diſſertation on Fevers and Infection, chap. I. ſect. V.—chap. IV. ſect. IV.---and in Dr. Miller's Obſervations on the Management of the prevailing Diſeaſes in Great-Britain,---from page 267 to 293.

it

it is intended to repreſent the moſt general, or the ſtrongeſt features only.—A more minute portraiture, or deſcription is ſet forth in part II. chap. I. ſect. II.

7th. We ought now to endeavour to eſtabliſh the third poſition, namely, That bark far excels all other medicines extoled, for curing the ſhip-fever; and though that will more properly be done, when we come to the treatment of the fever, and to ſhow the different methods which circumſtances obliged us to adopt in the management of it; we beg the reader's indulgence while we inſert one or two remarks reſpecting the adminiſtration of bark to cure fevers.

1ſt. I am fully perſuaded that bark has not hitherto been adminiſtered upon any *principle* by practitioners in general to cure a fever.

They do not preſcribe it in ſuch a manner as to ſhow either their own confidence that it will cure their patients; or that they judge it the moſt proper medicine when they do

preſcribe it—therefore, they do it, as they expreſs, themſelves, *with caution*; and when a few ſcruples or drachms have been given before the patient dies—though as many ounces were requiſite to recover him—they ſay "the bark did not anſwer in that caſe;" or, "that it failed." But, ſhould the patient ſtill live, and not recover ſpeedily, the bark is changed for ſome other medicine—inſtead of their increaſing the doſes of it, and repeating them oftner.

I, therefore, beg leave to aſk ſuch practitioners in phyſic a few plain queſtions: 1ſt, When they want to vomit, or to purge their patients, do they expect to effect thoſe evacuations unleſs they preſcribe a ſufficient doſe of ipecacuan and jalap? * 2d. Can they preciſely aſcertain a proper doſe of either for a patient whoſe conſtitution they are ſtrangers to?

3d. When either the doſe of the ipecacuan or jalap which they preſcribed, produced

* We make choice of theſe only becauſe they are the moſt common medicines.

the

the intended effect, would they ſay that theſe medicines failed to vomit and purge?

4th. On the contrary, would they not confeſs the doſes were too ſmall which they ordered; and would they not repeat thoſe medicines in certain proportions until they operated?

But ſuppoſing thoſe gentlemen produced a caſe or two of a fever, fully and fairly ſtated, which the bark failed to cure; could not I relate inſtances where jalap would not purge, nor ipecacuan vomit?—And ſhould they doubt the quality of the jalap and ipecacuan which was given; might not I with equal propriety doubt the goodneſs of the bark which they adminiſtered?

The propoſitions are clear; and the following inference is obvious and juſt.—Laying it down as an axiom that bark will as certainly cure the fever as ipecacuan will operate by vomiting, and jalap by ſtools—does it not follow, that to cure the fever, the quantity of bark muſt be as fully proportioned as the

the doſes of ipecacuan and jalap in their reſpective caſes?

Again, as in theſe caſes it is difficult to aſcertain the doſes until the conſtitution is known—is it any wonder that it is not yet aſcertained how much bark will cure the fever until the patient is recovered? *

Whoever then expects to cure fevers with bark, and adminiſters it upon no principle or upon any other than—*That the quantity to be given muſt be proportioned to the caſe; and that the requiſite quantity can only be known when the patient is recovered*—will often have cauſe to exclaim "That the bark failed him"—a ſort of cant which I believe has occaſioned the loſs of thouſands of men, by its being paſſed from one to another on the ſimple foundation we have mentioned.

*I do not think it ever can be fully aſcertained any other way---though we may by a proper uſe of the bark arrive at as great a certainty in time---what the requiſite quantity of it, is; as for any other medicine for a particular purpoſe.---Is it yet aſcertained how much mercury will cure a man of the venereal diſeaſe?

Another

Another circumſtance which ſtrikes me forcibly reſpecting the adminiſtration of bark for a fever, is, that practitioners do not preſcribe it early enough to be ſpeedily productive of ſucceſs—ſuppoſing they gave it liberally when they do begin to give it—which is ſeldom the caſe.

I cannot comprehend what could introduce the precept, and ſupport it ſo long and ſo generally, to delay giving the bark until there is a remiſſion—indeed many wait for an intermiſſion; and as that ſeldom happens in the ſhip-fever, they often looſe their patients by fruitleſs expectations and endeavours to effect it.—Upon whatever authority this dangerous precept was eſtabliſhed, or how venerable ſoever their names who have maintained it, I know from *experience* it is one of the moſt fatal precepts that ever was inculcated in the practice of phyſic. For the proofs of this aſſertion we muſt refer the reader to part II. and to the appendix.

OBSERVATIONS, &c.

PART I.

CHAP. I.

SECT. I.

MONTHLY REVIEW OF THE SICK LIST;

From APRIL 4, *to* AUGUST 31, 1776.

WHEN we sailed on the 4th of April from St. Helen's, on our voyage to Quebec, the patients on the sick list were, one with fever; one with eruptions; one with itch; one with inflammation; and three with foul ulcers.

The wind varied much and often, tho' in general it was between the Northward and Eastward, until the 12th, when it got round to ESE. From thence it veered to the SW. On the 15th

it was from South to Eaſt; on the 16th, from NE *b* N to NNW, varying to N *b* E, 'till the 20th, when it came to SW, and varied between that and N *b* E, until the 27th. It then varied from ENE to SSE: on the 28th, and afterwards, got back to the N and NW, ſtill varying. On the 8th, 9th, 15th, 16th, 25th, it blew gales; the 19th and 20th it was ſometimes calm. The 11th, 12th, 15th, 17th, 21ſt, 22d, 23d, 24th, light ſhowers; the 25th, ſhowers; 28th, light ſhowers. The atmoſphere was generally cloudy, ſometimes clear, but ſeldom foggy, except when we croſſed the banks of Newfoundland. The moon was full the day we ſailed, and changed the 18th. The mean height of the thermometer was about 57 degrees.

The ſick liſt did not vary much, but rather increaſed regularly until the 23d—decreaſed until the 27th, when it increaſed; and then decreaſed rather, to the end of the month. The number who were added, were thirty with fever; two with ſcurvy; one with rheumatiſm; one with gout; two, hectic; one with a cough; one with hæmorrhoides; one with eruptions; four with itch; one with a ſcald; two with ſtrains; three with contuſions; one with a fracture; three with inflammations; one with a ſwelling of the knee; two with abſceſſes; one with excoriation; and five with ulcers.—In all, 62; including thoſe who were on the liſt the day we ſailed.

I ſent

I ſent three fever patients to the hoſpital in the month of March. Amongſt the fever patients are included thoſe complaints which are vulgarly called colds; being accompanied with ſymptoms of fever: a number of thoſe were ſlight, and eaſily carried off; but were ſo claſſed to avoid multiplying diſeaſes, or columns in the general table. This is to be underſtood of all ſuch caſes until the month of September begins; only we ſhall take notice in the month of Auguſt of ſuch as had ſeverer attacks of fever, the ſymptoms which accompanied it, and the manner in which it was treated. Of other diſeaſes, it is not my intention to treat.

MAY.

The wind was as variable as in the preceding month, but much more Weſterly, and always moderate, except the 10th, gales. On the 1ſt, 2d, 14th, 18th, 19th, 20th, 22d, and 28th, at times it was calm. We had heavy dews the 1ſt and 2d; 4th and 5th, light ſhowers with ſnow; 7th, ſnow; 8th, light ſhowers; 9th, ſhowers; 11th, 12th, 15th, 16th, light ſhowers; 18th, ſnow; 21, ſhowers; 23d and 25th, light ſhowers. The atmoſphere was often very foggy, and wet every thing, particularly in the beginning of the month. Sometimes it was very hazy,

hazy, at others cloudy, and ſeldom clear.—— The moon was full the third, and changed the 17th. The mean height of the thermometer was about 47 deg. It was often very cold in St. Laurence's river.

The number of ſick firſt increaſed a little, then decreaſed ſomewhat, but varying little until the 12th, when it increaſed, and rather continued doing ſo until the middle of the month, then decreaſed to the 20th. From that time it varied very little until the 27th, when it began to decreaſe, and altered very little from the 28th to the end.—On the 8th grogg was begun to be ſerved.—At the end of the month we arrived at Quebec.

The patients added to the ſick liſt this month were, forty with fevers; one with quinſey; one with plethora; one with a dyſentery; three with the belly-ache; one with a ſingultus; one with deafneſs; one with a nephritis; one with hæmorrhoides; two with eruptions; one with itch; ſeven with contuſions; one, wounded; two with inflammations; one with a ſwelling of the knee; and eight with abſceſſes:—in all, 73.

On the 24th, a boy died of a fever, which proceeded from a fracture in the neck of the os femoris, and ended in a tetanus, or locked jaw. The day before he died, I was informed, he had hurt himſelf at play before he was taken ill. When he came to me firſt, although he complained of a pain about the ſuperior and anterior part of the

the thigh, I dropt the idea that he had hurt it, until the tetanus came on; becauſe he firmly denied, from his firſt complaining, that he had received any hurt.

Nothing further material happened in the courſe of the month.

JUNE.

The 5th and 6th the wind varied; as it did alſo on the 12th, 17th, 19th, and 20th; but was then chiefly SW.—Otherwiſe it was NE, or ENE. Then it was SW or Weſterly with calms, until the 25th, and from that time varied until the end of the month; and all along, excepting the 13th and 14th, gales, it was light airs or freſh breezes. The 1ſt and 4th, light ſhowers; 6th, ſhowers with thunder; 13th, 14th, 16th, 17th, 18th, and 19th, light ſhowers, with *t* and *l*; 20th, light ſhowers, with *h t* and *l*; 22d, ſhowers, *h t l*; 23d, ſhowers, *t l*; 24th, 26th, 28th, 29th, light ſhowers, *t l*. The atmoſphere was often clear, eſpecially in the beginning, but was more generally cloudy throughout the month. The 3d the moon was full, and changed the 16th.

Excepting the firſt day, the ſick liſt rather decreaſed until the 8th, when it increaſed, and the following patients were ſent to the hoſpital;—one with a fever (a weak man); one with the ſcurvy;

ſcurvy; one with the gout; two with coughs; one with the epilepſy; one with eruption; and three wilh ulcers. It increaſed until the 12th, decreaſed until the 15th, increaſed until the 18th, varied little until the 27th, and decreaſed again.

The patients who complained this month were, ſixteen of fevers; one of a pleuriſy; five of dyſentery; two of the ſcurvy; one of the rheumatiſm; two of the gout; one with hæmorrhage; two with coughs; one with epilepſy; one with itch; one with a rupture; eight with contuſions; and one of an excoriation:—42 in all.

The ſhip's company were ſerved freſh beef on Saturdays and Sundays; and ſpruce beer after the 8th.——The hoſpital was a ſhocking houſe, and under a very high hill, cloſe to the river on the Point Levi ſide. Before we arrived, they were taken into the general army hoſpital, and had been there all the winter.—On the 24th, the pleuritic patient was ſent to the hoſpital in a convaleſcent ſtate; and ſeven of them who were ſent on the 8th, returned on board; and on the 25th I applied to have them invalided. Two of the fever patients were ſent ſmall-pox patients to the hoſpital: one of them, who was ſeized ſeveral days before with the ſymptoms which commonly appear before the eruption, had ſeen a man ill of the ſmall-pox at the hoſpital, who died there; but they are claſſed fever patients, becauſe it was uncertain if it was the ſmall-pox.—Thirteen in all were ſent to the hoſpital.

On

On the 8th the patient died of the ſingultus.

Every thing at market was very dear.—Scarce any ſort of vegetables.

JULY.

Excepting the 2d and 16th, when it was ENE, the wind varied backwards and forwards from S *b* W round to NW, until the 18th with moderate gales; from the 9th to the 16th calms A.M. It then got round to the NE, 'till the 21ſt, when it varied, and was calm part of the day. It again came to SW, blowing moderately with little variation until the 29th; A.M. commonly calm, after which it was variable. 1ſt, light ſhowers, *t l*; 2d, ditto, *l*; 4th, ſhowers, *t l*; 5th, light ſhowers; 7th, *l*; 9th, ſhowers; 11th, 12th, ditto, *t l*; 16th, ſhowers; 17th, light ditto; 21ſt, ditto, *t*; 22d, 24th, 26th, 28th, light ſhowers; 29th, hard ſhowers; 31ſt, light ditto. The atmoſphere was cloudy and clear alternately, but not quite regularly ſo every other day. The moon was full the 1ſt, changed the 15th, and full the 30th. The mean height of the thermometer was about 66 deg.—It was lower in the city at noon, than in the lower town, or on board of our ſhip.

The ſick liſt varied little, but increaſed towards the middle of the month; from which time it decreaſed until the 26th, when it increaſed;

creaſed; decreaſed for two days again, and increaſed to the end.

The patients who complained this month were, ſeven of fevers; one of a dyſentery; one of the belly-ach; three of the ſcurvy; two of rheumatiſm; one of a ſore throat; four of a cough; one of the epilepſy; one of a ſtrain; five of contuſions; one of a fracture; one of a wound; one of an inflammation; two of abſceſſes; and one of an ulcer:—32 in all. So that as the weather became mild and warm, the ſick liſt decreaſed.—But this ſubject will be more fully diſcuſſed next month.

We had ſome marines ſent on board a tranſport to guard priſoners.—Every thing aſhore at market, except vegetables, (which were ſtill ſcarce) became much cheaper. The ſcurvy had hitherto been the moſt prevalent diſeaſe in the hoſpital, ſince it was eſtabliſhed. The Triton ſent a number of ſcorbutic patients to it; but the men having got ſpirits to buy at the Brunſwick camp, which was on the top of the hill, lived irregular. Very few were ſeized with ſmall-pox aſhore. I ſent two ſcorbutic patients to the hoſpital,one with ſmall-pox, and one with fever.—Towards the end of the month,the Pearl returned from a cruize in the gulph, with many of the people ſcorbutic: they had blowing foggy weather. We were now ſerved freſh beef three times a week.

The

The Brunſwick troops had a very mortal fever among them; the following ſhort account of it I had from the ſurgeon general to the garriſon.

"They were generally bad three days before they were brought to the hoſpital to him; that they were then delirious, with their tongues black and chopt, and their teeth covered with ſordes; that they had petechiæ, and a flux on them, and that they generally died within 48 hours after their admiſſion. That he obſerved no remiſſion of the fever; that their pulſes never indicated a ſtrong fever, nor even danger; but all who were ſo ill at their admiſſion as not to be able to put out their tongues to ſhow them, died. That he ordered them, as ſoon as they were admitted, to be well waſhed in warm water and vinegar, and the bark to be given them freely with Port wine. And concluded with ſaying, (upon my enquiry if he had made uſe of bliſters) that he did not approve of them in fevers with petechiæ; but that he perhaps might have applied them, had the patients been brought to the hoſpital when they were firſt taken ill."

AUGUST.

The 1ſt and 2d the wind was variable, but Eaſterly; from the 3d to the 8th, it was from WSW to SW, varying a great deal; but ſtill more from the 8th to the 11th, when it came to

the Eaſtward, and continued ſo until the 14th; it then veered to the SW, continued there until the 26th, varying little the laſt ſix or ſeven days. Now it veered from WNW to ENE, and continued there, with little variation, until the laſt day of the month, when it got to the WSW.—All the month was moderate, and on the 2d, 14th, 15th, 21ſt, 30th, and 31ſt, at times calm; 2d, 3d, light ſhowers, *t l*; 7th, 8th, 9th, 13th, light ſhowers; 16th, 21ſt, ſhowers, *t l*; 25th, light ſhowers. Until the 21ſt, the atmoſphere was very ſeldom otherwiſe than clear; but the 18th was foggy and hazy; from that time until the end, it was almoſt cloudy or hazy; 26th and 28th, ſometimes foggy. The moon was new the 14th, and full the 29th. The mean height of the thermometer was 65 deg. But it is to be obſerved, that we left Quebec the 23d, and that the thermometer became gradually lower as we got down the river, ſo that in eight days it was 9 deg. lower than it was the day we left Quebec: it continued lower while we were at Bique-iſland.

On the 5th, two of our men, one of the ſcurvy, (one of the marines that were on board the tranſport) the other with a fever, were ſent to the hoſpital; and one with a cough on the 13th.—The liſt decreaſed until the 16th, when it increaſed, varied for two days, and decreaſed on the 19th, then continued without alteration until the 23d, when our four men came from the hoſpital; after

after which it varied until the end, but rather increaſed.

On the 13th, two of our men were invalided by a ſcurvy. We were ſerved freſh beef every meat-day, ſome time before we left Quebec. The 26th we arrived at Bique-iſland, where our men were employed to cut wood for the ſhip's uſe,—and ſailed from thence on the 31ſt.

The patients who were added to the liſt, were three with fevers, one with a head-ach, nine with dyſenterick complaints, two with the belly-ach, one with the ſcurvy, one with the rheumatiſm, one conſumptive or hectic patient, two with ſore throats, three with coughs, one with deafneſs, one with giddineſs, one with eruptions, one with a ſtrain, one with a contuſion, three with wounds, one with an inflammation, one with an abſceſs, and one with a furuncle:—in all 34.

SECT. II.

Obſervations on the FEVER *of the preceding Months.*

WE are now come to a period wherein a very important change of the health of the ſhip's company began to appear; but before we proceed to ſhow that change, it may not be improper to enumerate the ſymptoms of the fever

which hitherto affected the people, and to compare them with thoſe which occurred in the enſuing months. However, it is not my intention to draw this compariſon at preſent to minuteneſs, but to repreſent, if poſſible, the characteriſtic marks of the jail or ſhip fever, which are inſerted in the introduction. The particular deſcription of this fever will more properly follow the diary of the ſick liſt and monthly review.

Many of thoſe who in the preceding months are ranged as fever patients, were ſo ſlightly affected, as to bring them, not very improperly, within the vulgar denomination of colds; although, as they had all at leaſt *ſome* feveriſh ſymptoms, I choſe to claſs them as fevers, to avoid the multiplying of columns of diſeaſes in the tables.

The ſymptoms of ſuch patients were mild intermitting complaints. The pulſe was very different in different patients; thirſts, loathing of food, ſickneſs at the ſtomach, head-ach, cough, ſore throat, hoarſeneſs, acute pains of the ſides, pain of the back, and in all their bones, (as they expreſs themſelves) or univerſal pains, ſtraitneſs about the breaſt, griping complaints, deafneſs accompanying a ſore throat, (tho' this was very ſeldom) giddineſs, eſpecially in the month of May, and conſtipations.

I thought it neceſſary to take away blood in ſome caſes only. Gentle evacuations by vomit and

and ſtool, promoting a moderate diaphoreſis with eſſence of antimony or tartar emetic, together with opium, or tinct. theb. ſometimes; boluſſes of ſperma-ceti and nitre, or the oily mixture, repeated as there was occaſion, with diluting drink, and the volatile liniment applied to the throat, carried their complaints off in a few days.

Although the preceding caſes were by far the greater number of the fever patients, yet many had the fever in a ſeverer manner, as may be ſeen from the following ſymptoms and their duration, which are collected from *all their caſes*, and enumerated daily. But neither the pleuritic caſe, nor two others (which were occaſioned by putting a corpſe into a coffin) are made mention of; though theſe two indeed were ſlight. It is not, therefore, to be underſtood that all the ſymptoms which are enumerated in any one day, occured in a ſingle caſe.

1. They were ſeized with chillneſs and rigors, ſucceeded by heats, thirſt, and univerſal pains and uneaſineſs; pains in the ſide and back, difficulty of breathing, tightneſs about the throat, great hoarſeneſs, cough, head-ach, giddineſs, and ſickneſs at the ſtomach; the pulſe quick and full.

2. Some had very reſtleſs nights, without any remiſſion from the head-ach, and a pain that went round in the direction of the diaphragm, eſpecially with a cough, which was dry and urgent;

gent; and from pain of the breaſt that affected reſpiration, the countenance was fluſhed, and the eyes watered; remiſſions, paroxiſms, coſtiveneſs, profuſe ſweats, the thirſt continued, and the pulſe was in ſome full and quick.

3. The paroxiſms continued above twelve hours, with the ſymptoms as ſevere as in the firſt paroxiſm; pains in the knees, and about the ſhoulders, a frequent cough, and ſcarce any expectoration; a little cough and pain only.

4. Tho' cool, there was a dry, urgent cough, with pain at the ſcrobiculus cordis; the remiſſion continued ſix hours, and the next paroxiſm eight. Stiffneſs about the eyes, weakneſs, the pain of the breaſt, and a head-ach from the cough, tho' expectoration began.

4. Profuſe ſweat the preceding night, a very teazing cough, weakneſs, with much pain about the breaſt, and either no expectoration, or a difficult one in ſome caſes; no appetite, and the tongue was white.—On the 5th, of the ſlight fever, the pulſe of a man who was ſubject to epilepſy, became quick and full, with giddineſs and head-ach.

6. In the epileptic caſe there was a degree of ſtupor.—P.M. an acceſſion of fever; the ſkin was hot and dry, the tongue dry; thirſt, large quantities of urine, and languor; tho' ſome were recovering.

7. In

In the epileptic caſe, the paroxiſm went off in the night, by a large quantity of urine, and a copious ſtool. PM. a paroxiſm came on—an acceſſion of fever happened after the patient had been in a recovering ſtate for four days,—weakneſs—recovering ſlowly.

8. A difficult reſpiration, with cough—pain of the back and weakneſs—ſome recovering—the paroxiſm of the epileptic caſe ended as the preceding. PM. a paroxiſm came on.

9. Cough and hoarſeneſs continued—the epileptic patient uncertain when the paroxiſm left him, and complained of his back.

10. A free expectoration, and recovering—the epileptic man paſſed an indifferent night; his head ached and was giddy, and his mouth and tongue were foul.

11. The epileptic patient had ſhooting pains in his head at times, but was recovering.—One recovered.*

12. It was diſcovered that the epileptic patient was very louſy, tho' recovering.—Hoarſeneſs continued—weakneſs.

13. It was a conſiderable time before he recovered any ſpirits, and he was invalided the 25th of June.

18. One patient continued weak, and was ſent to the hoſpital; but this man had hurt his breaſt not long before by a fall.

* TIDFORD, by bark.

The Method of Cure.

It was not a general rule with me to let blood: —that depending ſolely on circumſtances. A vomit was moſt commonly given at firſt; and if the patient was bled, the vomit was given a few hours after, and from xxv. to xl. drops of Eſſent. Antimon. with refrigerating and diluting drink at night. Next morning an ounce of ſalts was given, and the eſſence of antimony repeated in the evening. After thoſe moderate evacuations, (which were ſeldom repeated) I preſcribed Cort. Peruv. ʒi or ʒiß every hour, until the patient was out of danger; and afterwards it was given leſs frequent, and at this time Elix. Vitr. was often joined with it. When I began to give the bark, I did not omit it for any exacerbation of the ſymptoms.

CHAP.

CHAP. II.

SECT. I.

A DIARY OF THE WEATHER,

From SEPTEMBER 1, 1776, *until* JUNE 30, 1777.

Year, M. & Day.	Therm.	Latitude, or, different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1766 Die Sab. Sept: 1	60	Off Cape Moriere, 48°, 58″		19	*v* W*b*S *	*cl*	o
2	60	a & f		20	*v* SW*b*W *	*ch*	
3	63	Hills-burgh bay		21	*v* NW*b*W *	*ch*	
4	65			22	*v* S*E b*E * *	*cl*	o
5	61½			23	*v* SE*b*E * *	*cl*	
6	61	f		24	N *v* * *	*ch*	o
7	63	Off Madame		25	N *v* —	*c*	
8	64	44 45	00° 51″W	26	*f* SSW *t* W * * * *	*cl f*	o o
9	61	Off Cape Breton, 45 23		27	NW * *	*c*	
10	61½	44 42 a pm. Beaver-harbour.		28	*f* NW *t* SW * *	*ch*	
11	63½			29	S * *	*f cl*	o
12	60	a m. f		n m	NNW *	*c*	

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &
1776 Sept. 13	63½	am. a Halifax 44° 45″	in 64° 35″W	1	SW *v* *	*c*	
14	65			2	*v* * *	*cl*	
15	65			3	*v* W*b*S *	*h f*	o o
16	56			4	NW * *	*c*	
17	56½			5	NW * *	*cl*	
18	63			6	*v* W *	*ch*	
19	64			7	*v* NNW *	*c*	
20	61			8	NW*b*N *	*c*	
21	64			9	S *v* *	*cl*	
22	65½			10	*v* SW *	*ch f* & *c*	o o
23	64½			11	SSE *	*ch f* & *c*	
24	57½			12	NNW *	*f*	o o o
25	57½			13	NNW * * *	*ch*	o
26	59½	*f*		14	W * *	*c*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1770 Sept 27	60½	44° 06″		p	SW v **	cl	
28	55½	43 29		16	NNW **	c	
29	55½	43 30 a pm. Le Have		17	v ***	ch	
30	59			18	SSW **	f	
Oct. 1 Die Mart	59½	am. f		19	NW *	c	
2	54	43 49		20	WNW v **	c	
3	56	42 50	00° 33″ W male.	21	ESE v **	c	
4	58½	42 36	01 09 W	22	ESE v **	f	0
5	58	42 42	01 01 W	23	ENE **	ch	
6	54½	42 56	01 03 W	24	ENE v *	ch	0
7	59	43 15	01 56 W	25	E v **	ch	
8	58½	43 03	01 49 W	26	SE v *	ch	
9	60½	42 58	01 56 W	27	WSW *	ch	0

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	's Age.	Winds.	Appear. of the Atmosph.	Rain. dew thunder, hail, snow &c.
1776 Oct. 10	60	43° 07″	00° 06″ E	28	NNW *v* **	*ch*	o
11	53½	44 06	01 04 E	29	*v* NbW **	*cl*	o
12	49	44 09 pm. a Halifax		n pm	WSW **	*c*	
13	53			1	WSW *v* **	*c*	
14	53			2	WNW *	*cl*	*h f*
15	53			3	*v* **	*c*	
16	54			4	SbE — *	*ch*	
17	58½			5	*v* * —	*cl*	o o
18	61½			6	SE *v* * *	*cl*	
19	58½	am. f		7	W *v* * *	*cl*	o
20	57½	Le Have 43 50		8	NW *v* * * * . *	*cl*	
21	58½			9	SW *v* ***	*cl*	
22	53			10	NWbW *v* * * *	*cl*	o

Year, M & Day.	Therm.	Latitude, or different parts.	Long. in or made.	's Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1776 Oct. 23	52	am. f 44° 01″ pm. a Le Have		11	WNW WSW ∿ * *	*h*	
24	58			12	SW ∿ * *	*cl*	
25	61			13	SW ∿ * *	*f*	o o *t l*
26	60	am. f 44 03		14	NE ∿ *	*ch*	o
27	57½	43 10	00° 51″ W	p am	NW ∿ *	*f*	
28	55½	43 47 off Cape St. Mary		16	∿ * *	*ch*	o
29	53	43 46	01 10 W	17	NNW ∿ *. * *	*ch*	o
30	47	Bay of Fundy pm. a		18	NNW ∿ *. * *	*cl*	
31	50			19	SW * * *	*ch*	o o
Nov. 1 Die Ven.	58½			20	∿ NNW *	*ch*	o
2	52			21	WNW ∿ *. * *	*cl*	o o
3	46½	am. f		22	∿ NNW *. * *	*cl*	*f* o

Year, M. & Day	Therm.	Lati.ude, or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1776 Nov. 4	46½			23	*v* SW * . * *	*cl*	*f*
5	52	Off Annapolis pm. a		24	SW *v* * . * *	*cl*	
6	56			25	SW * —	*cl*	
7	55½	am. f		26	NE * . * *	*f*	
8	56	43° 15″		27	Nly *v* * *	*h*	
9	54	Cruising		28	*v* NNE *	*h*	
10	57	Off Segvina		29	*v* W * —	*h*	
11	55	43 29	00° 51″ E made	n am	ENE *v* * *	*ch*	
12	49½	43 20		2	*f* NNE *t* NNW * *	*ch*	
13	50			3	NW *v* *	*c*	
14	49	43 58		4	NW *v* * *	*c*	
15	49½	43 31		5	Nly *v* * —	*cl*	
16	50½	43 48		6	SW *v* * . * *	*c*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	's Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1776 Nov. 17	48	43° 20″		7	*f* NbE *t* NW * *	*c*	
18	46½	42 54	01° 05″ E made	8	Nly *v* *	*c*	
19	48½	43 00	02 40 E	9	Nly *v* *	*cl*	
20	52½	43 20		10	*v* *	*cl*	
21	55	43 32		11	SW *v* * . * *	*c*	
22	55½	Halifax am. a		12	SW *v* * . * *	*cl*	
23	57			13	SW *	*cl*	o
24	58			14	SbE *v* * —	*h*	o
25	57			15	SE *	*f*	
26	59			16	SW * *	*f*	
27	60			17	NNW * —	*f*	o
28	56½	pm. f & a		18	NW *v* * . * *	*ch*	o
29	52½			19	Wly *	*c*	
30	55			20	ESE *v* * *	*f*	o o

Year, M. & Day.	Therm.	Latitude. or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1770 Dec. 1 Die Sab.	55			21	*v* **	*cl*	o
2	51			22	WNW *v* **	*cl*	*f* o
3	45			23	*v* NW *	*ch*	*f* o
4	53			24	SSW *v* **	*ch*	o o
5	49			25	NW *v* **	*cl*	
6	46½	f		26	Nly *v* *	*c*	
7	51	43° 27″	00° 34″E made	27	Wly *v* **	*cl*	
8	53½	42 25	00 48 E	28	Wly *v* **	*cl*	
9	51½	41 24	00 21 E	29	NNW *v* *. ***	*cl*	
10	49	40 22	00 08W	n	N *v* ***	*cl*	o *f h*
11	55	39 12	00 42W	1	NNW *v* **	*ch*	o
12	57½	39 17	02 50W	2	SE *v* ***	*cl*	o
13	61½	38 34	03 30W	3	NNE *v* *. ***	*cl*	
14	63	39 45	04 24W	4	*v* W ***	*cl*	o

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1776 Dec. 15	54½	39° 13″	in 04° 13″W	5	NNW *v* ***	*cl*	
16	59	39 15	04 36	6	W *v* ***	*cl*	o o
17	56½	38 53	05 41	7	NE *v* * *	*ch*	o
18	58	38 06	07 30	8	*f* W*b*N *t* NW*b*W * * *	*cl*	
19	55½	37 45	07 02	9	N * * *	*cl*	*f*
20	57½	37 34	08 12	10	N *v* * *	*cl*	o
21	63	39 15	09 04	11	SE *v* ***	*cl*	o o *l*
22	56½	39 52	08 36	12	*v* W*b*N ***	*cl*	*f* o
23	53½	40 01	08 07	13	NW*b*W *v* * *	*cl*	
24	51½	38 34	08 56	14	Nly *v* * *	*ch*	
25	50	38 54	10 07	15	NE *v* * *	*cl*	
26	56	40 12	11 15	16	E*b*N *v* ***	*cl*	o o
27	54	39 45	10 51	17	NW *v* *	*ch*	
28	51	39 35	11 20	18	NNW *v* * *	*cl*	*f*

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1776 Dec. 29	46½	39° 30″	12° 57″W	19	N *v* **	*cl*	
30	50½	Off Egg island.		20	SW *v* *	*h*	
31	50½	Sandy Hook. pm. a		21	ENE *v* *	*cl*	
1777 Jan. 1 Die. Mer.	53	f N. York, a North River.		22	SE *	*cl*	
2	46½			23	NW **	*c*	
3	42½			24	NW *	*cl*	*f*
4	42½			25	NWN **	*cl*	*f*
5	41½			26	NW *	*cl*	*f*
6	41			27	NW *	*c*	*f*
7	38½			28	NWN **	*c*	*f*
8	38			29	NWN **	*cl*	*f*
9	39			n am	WNW **	*cl*	*f*
10	36 25			2	NWW *	*cl*	*f*

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph.	Rair, dew thunder, hail, snow &c.
1777 Jan. 11	39			3	WNW *v* **	*cl*	*f*
12	39			4	NW **	*c*	*f*
13	39½			5	NW **	*c*	*f*
14	39½			6	NW **	*c*	*f*
15	41½			7	WNW * *	*c*	*f*
16	48			8	SW **	*h*	*f*
17	44			9	NW * *	*c*	*f*
18	42			10	NNW * *	*c*	*f*
19	43			11	S **	*h*	*f*
20	46			12	NW SW **	*ch*	
21	52 F			13	*f* SSW *t* NW *	*ch*	
22	46			14	N *v* *	*cl*	
23	45			15	*v* *	*h*	*f*
24	48½			16	*v* * * * *	*cl*	o o

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 Jan. 25	52½			17	W *v* *	*cl*	
26	52½			18	NE *v* *	*cl*	
27	50½			19	*v* *	*cl*	
28	48			20	NE *	*cl*	
29	47½	NewYork		21	NE *v* *	*h*	*f*
30	46½			22	NW NNW **	*cl*	*f*
31	47			23	NW *v*	*ch*	
Feb. 1 Die Sat.	46½			24	W *	*c*	
2	50½	f & a bet. L. iſland &N.York		25	SW *	*cl*	
3	47	f		26	NW *	*c*	
4	42½	41° 08″ pm. a off Gardiners iſland.		27	N *v* * —	*c*	*f*
5	47	f & pm. a Rhode iſl.		28	S *v* **	*h*	
6	39			29	NW **	*c*	*f*

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 Feb. 7	39			n	NW * * *	*c*	*f*
8	43			1	SE * *	*cl*	o *f*
9	47			2	NW * * *	*c*	
10	46½			3	SW * *	*ch*	
11	43			4	*v f* SE *t* NE * * *	*ch*	o o *ſſ*
12	40			5	WNW * * *	*cl*	
13	34	f		6	E *v* *	*c*	*f*
14	39½	Off Long iſland		7	*v* NNE * *	*cl*	*ſ*
15	38	pm. a Block iſl.		8	*v* NW * *	*cl*	*f*
16	39½	am. f		9	WNW *v* * *	*cl*	*f*
17	43½	Cruiſing		10	NW *	*h*	*ſ*
18	42½			11	NW * *	*cl*	*ſ*
19	35			12	*f* N *t* NW *	*c*	*f*
20	29½	Block iſl. pm. a		13	NW * *	*c*	*f*

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1777 Feb. 21	29	am. f		14	NW * —	*cl*	*f*
22	38	Cruising.		p	NNW *v* *	*ch*	*f*
23	41½			16	NNE *v* * *	*h*	*f*
24	44	39° 50″	00ª 09″ E	17	*v* E * * *	*ch*	o o *f*
25	42½	39 27	00 50 W	18	NNW * * *	*cl*	o *f*
26	44	39 51	00 25 W	19	WNW * *	*c*	
27	43			20	WSW *v* *	*ch*	
28	38	40 20		21	NW *v* *	*ch*	*f*
Mar. 1 Die Sat.	38½			22	NW*b*N *v* * * *	*f*	*f*
2	34½			23	NE *v* * *	*ch*	*f*
3	36	40 42		24	*v* * *	*c*	*f*
4	47	pm. a Block isl.		25	*f* WSW *t* SW*b*S * *	*ch*	*f*
5	36	f		26	WNW *v* * *	*ch*	o *f*
6	41½	Cruising.		27	E *v* * * *	*h*	o o *f*

Year, M. & Day.	Therm.	Latitude; or, different parts.	Long. in or made.	☽'s Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1777 Mar. 7	44½			28	N *v* * *	*h*	o ◎ *ſ*
8	46			29	*v* *	*h*	
9	48			n m	*f* SSW *t* SSE *	*h*	o
10	47			2	WSW *	*c*	
11	47			3	*v* SSW *	*c*	
12	47½			4	*f* SSE *t* SW*b*W * *	*f*	o
13	49			5	*f* NNE *t* NW*b*W * *	*ch*	o o
14	47	Rhode iſl. pm. a		6	NW *v* * *	*c*	
15	47			7	SW * *	*h*	
16	48½			8	SW *v* * *	*h*	
17	49	am. f pm. a Block iſl.		9	Wly * *	*c*	
18	47	a m. f Long iſl. pm. a		10	WSW * *	*c*	

Year, M. & Day.	Therm.	Latitude, or different parts	Long. in or made.	's Agc.	Winds.	Appear. of the Atmosph	Rain, dew, thunder, hail, snow &c.
1777 Mar. 19	47	Plum isl a am		11	Wly *	c	
20	48	Sneiler isl f am. & a		12	Ely * * *	f	o o c
21	48½			13	Wly * *	c	
22	48			14	f WbN t SW * *	c	
23	47			p	Wly * *	c	
24	47			16	f SW t NW *	cl	
25	45½			17	NW * *	c	
26	41			18	NW * *	c	f
27	42½	Rhode isl. am. f pm. a		19	NW * *	c	
28	35			20	NW * *	c	f
29	41			21	SW * *	cl	o
30	46½	Off Prudence f & a		22	SW *	ch	
31	48½			23	NW v * *	ch	o

Year, M. & Day.	Therm.	Latitude, or, different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 April 1 Die Mar	47			24	SW *	*ch*	
2	47			25	Nly *	*c*	
3	48½			26	*v* *	*f*	o o
4	42			27	NW * *	*c*	*f*
5	42½			28	NW SW * *	*c*	*f*
6	46½			29	Sly * *	*c*	
7	47½			n	SSW * *	*h*	
8	49½			1	SSW * *	*h*	
9	51			2	*v* *	*h*	
10	50½			3	*v* * —	*f*	o
11	51½			4	NW *v* * *	*ch*	o
12	51½			5	*v* *	*c*	
13	52			6	Sly * *	*cl*	o o
14	55			7	* * * NW	*c*	

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made.	☽'s Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 April 15	46			8	NW *	*c*	*f*
16	48½			9	Sly *	*h*	
17	51½			10	Nly *	*h*	o
18	52			11	*v* * *	*f*	o
19	52			12	E *v* *	*f*	o
20	51½			13	NE * *	*f*	
21	52			14	*v* *	*f*	
22	52			15	Sly *	*f*	
23	55			16	NE * *	*h*	
24	55			17	Nly * *	*h*	
25	54			18	N * *	*h*	o
26	52			19	Sly *	*h*	o
27	52			20	Nly *v* *	*ch*	o
28	51			21	NW *	*c*	
29	48			22	*v* *	*cl*	
30	48			23	NW SW * *	*cl*	

Year, M. & Day	Therm.	Latitude or different parts.	Long. in or made.	's age	Winds	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1777 May 1 Die Jovis	48			24	SE Nly * * *	*cl*	o o
2	47½			25	NW * *	*c*	
3	50			26	SW *	*c*	
4	53			27	Sly *	*ch*	o
5	54			28	Nly *v* *	*ch*	o o
6	55			29	Nly *	*c*	
7	53½			n	SE * *	*h*	o
8	54½			1	Sly *	*h*	
9	54			2	NE *	*cl*	o o
10	54			3	Nly *	*cl*	
11	5[illegible]			4	*v* *	*cl*	o
12	4[illegible]			5	NW *v* * *	*ch*	o
13	48½			6	NW * *	*cl*	*h*
14	50½			7	SW * *	*c*	
15	53			8	SW * *	*c*	
16	55			9	Sly * *	*ch*	o o

Year, M. & Day	Therm.	Latitude, or different parts.	Long. in or made	's Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 May 17	55½			10	Sly * *	*ch*	o
18	56½			11	Sly *	*cl*	o
19	58½			12	Sly *	*cl*	o
20	59			13	*v* *	*cl*	o
21	58½			14	*v* * *	*c*	
22	57			P	NW * *	*c*	
23	58			16	NW * *	*c*	
24	60			17	Sly * *	*c*	
25	59½			18	Nly * *	*c*	
26	59			19	Nly * *	*h*	
27	54½			20	NE * * *	*ch*	
28	55½			21	*v* * *	*c*	
29	59½	am. f pm. a		22	Sly *	*c*	*d*
30	59½	f & a		23	Sly *	*c*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 May 31	63	New Port		24	Sly * —	*c*	
1777 1 Die. Sab. Junii	64			25	Sly * —	*c*	
2	63	pm. f		26	SW * —	*ch*	
3	62½	40° 41″	00° 24″ E made	27	WSW **	*f*	*l*
4	62½	40 05	02 04 E	28	NW *v* *	*c*	
5	59½	41 51	02 50	n	SW *v* **	*c*	
6	59	42 55	02 31	1	Wly **	*c*	
7	60	43 28		2	NNW *v* * —	*ch*	
8	60	42 28		3	*v* **	*h*	
9	60½	42 04 Off Cape Cod.		4	SE *	*h*	o
10	60	42 04		5	SSE * —	*ch*	
11	62	Off Cape Cod.		6	Nly *	*h*	

Year, M. & Day.	Therm.	Latitude, or different parts.	Long. in or made.	's Age	Winds.	Appear. of the Atmosph.	Rain, dew thunder, hail, snow &c.
1777 Jun. 12	61½	42° 50″	00° 46″ E made	7	SE *v* * *	*f*	o
13	59	42 54	01 00	8	NE *v* * *	*f*	
14	59	Cruising.		9	*v* *	*c*	
15	61			10	Sly * —	*ch*	
16	62½			11	SSW *v* * —	*f*	o o *t l*
17	63½			12	*v* * —	*ch*	o *t l*
18	62½	42 14		13	*v* * *	*ch*	
19	62½	42 00	00° 39″ E	14	Nly *v* *	*ch*	
20	62	42 00	01 12	p	Nly *v* *	*ch*	
21	63	42 10	00 38	16	Nly *	*ch*	
22	61½	41 17		17	Ely *v* * *	*ch*	
23	60	Cruising		18	Syl * * *	*ch*	o
24	61	42 02		19	S * *	*ch*	o

Year, M & Day.	Therm.	Latitude, or different parts.	Long. in or made.	D's Age.	Winds.	Appear. of the Atmosph	Rain, dew thunder, hail, snow &c.
1777 Junii 25	63½	42° 31′		20	WNW v *	b	
26	63½	42 26		21	SW v *	b	l
27	67	pm. Cape Cod Bay.		22	Sly * *	cl	
28	68½	Cape Cod Harbour.		23	SSW *	b	
29	68			24	Sly v *	b	
30	68½			25	Sly v * —	b	

END OF THE DIARY OF THE WEATHER.

SECTION

SECTION II.

A DIARY *of the* SICK LIST, *with ſuch Occurrences as might be ſuppoſed to affect the Men's Health, from Sept.* 1, 1776, *'till June* 30, 1777.

SEPTEMBER.

1. THERE were on the ſick liſt, two with dyſenteries; one with ſcurvy; one with ſciatica; one with a conſumption, or hectic; one with a cough; one with deafneſs; one with a ſtrain:—8 in all.—We were now ſailing down the river St. Laurence.

2. The patient with the ſciatica, and the other with the ſtrain, recovered:—6 remained on the liſt. We caught a few cod, and anchored for two hours off the iſland of St. John.

3. No alteration of the ſick liſt.—Off Hillſborough-bay at anchor. AM. a boat was ſent up the river after the Lizard, with orders for Capt. Mackenzie.

4. One of the dyſenteric patients recovered, and three were added to the liſt with dyſenteric ſymptoms:—8 in all. Weighed, and anchored in the bay.—Nothing to be bought aſhore, the rebels having plundered the few inhabitants of every thing.—A fever on board the Lizard, and likewiſe on ſhore.

5. The patient with deafneſs recovered; and one with an abſceſs was added:—8 on the liſt. They are eat up with field-mice aſhore.

6. One of the patients who were added the 4th, recovered; and one complained of an ophthalmia:—8 on the ſick liſt. The inhabitants ſaid, that they caught the fever from the Lizard, or an armed veſſel that was very ſickly, which the Lizard relieved; and I have ſince been informed, it was from the ſaid veſſel that the Lizard's people got the infection. We bought a few bad and very dear vegetables, with a little milk for the ſcorbutic patient, a boy.—Sailed at noon.

7. Another of thoſe who were added to the liſt on the 4th, is well,—7 remain. AM. we ſailed through the gut of Canceaux; and PM. we caught a few cod oppoſite Iſle Madame.

8. One complained of a dyſentery, and one of an abſceſs:—9 on the liſt. A very diſagreeable day.

9. One, who complained of a contuſion, was added to the liſt:—10 on the liſt. We caught a few fiſh, off Cape Breton.

10. The flux patient of the 8th recovered; one complained of a dyſentery, as did alſo the patient with the cough; and one of a fever, who belonged to the cutter, and had been on board the Lizard:—12 on the ſick liſt. Query, Do the fiſh our men catch contribute to the dyſenteric

teric ſymptoms among them?——PM. we anchored in Beaver Harbour; one family aſhore at this place only.

11. The patient added yeſterday with the fever, is well:—11 on the liſt. Our men caught plenty of fiſh along ſide of the ſhip, and trucked with the fiſhermen for dry fiſh, milk, and potatoes. Only one family ſettled aſhore; an Indian and his ſquaw came on board.

12. The patient who complained on the 10th of the dyſentery, is well:—10 on the liſt. AM. we ſailed.

13. No alteration in the ſick liſt. We anchored in Halifax harbour; the Milford, and three armed veſſels here.

14. The other patient of the 4th, one of the 5th, and one of the 8th, with abſceſſes, and another of the 10th, with a head-ach, recovered:—6 on the liſt.

15. No alteration of the ſick liſt; we were ſerved freſh beef; forty of our men ſent up into the wood on duty, with two petty officers and a ſerjeant.

16. One complained of a fever, yeſterday PM. and had two paroxiſms before he complained: am informed that he was one of the cutter's crew, and was on board the Lizard at St. John's:—7 on the ſick liſt. Spruce beer was begun to be ſerved to the ſhip's company: I propoſed to the captain to have a tent erected

aſhore for the ſick, but he would not allow it.—Many of our people, eſpecially the marines, got drunk, were ungovernable, and ſtaid on ſhore all night.

17. The patient who was added yeſterday recovered. Three complained of dyſenteric ſymptoms: 9 on the liſt.

18 One complained of hæmorrhoides ſanguinoſæ:—10 on the liſt. The men have freſh beef ſerved them four times a week, and ſoft bread. The ſcorbutic patient very ill; men ſent to-day to the wood.

19. The other dyſenteric patient, who was on the liſt the 1ſt, (he was added the 29th ult. with a head-ach) and one of thoſe added the 27th, recovered. One complained of a wound, one of a ſtrain, and one of a contuſion:—11 in all.

20. Another of thoſe added the 17th, is well. One complained of a dyſentery:—11 on the liſt. Some of the ſick ſent aſhore to walk.

21. The patient of the 18th recovered; and one added with a ſtrain:—11 in all. His Majeſty's ſhip Rainbow came in from New-York.

22. The patient who had an old cough, returned to duty; and the other of the 17th, is well. Two added with fevers, one of whom was returned well on the 19th only; he formerly belonged to a boat; the other was one of the long-boat's crew, I believe, and was on board the Lizard:—11 on the ſick liſt.

23. One

23. One complained of the belly-ach:—12 on the ſick liſt.

24. The contuſed patient of the 19th, well; three with dyſenteric ſymptoms added to the ſick liſt:—14 in all. A very wet, diſagreeable day.

25. The patient added the 20th, and two of thoſe added yeſterday, are well; one complained of a wound:—12 on the ſick liſt.

26. One of thoſe added the 22d, recovered, and the other patient of the 24th is well; one complained of feveriſh ſymptoms:—11 on the liſt. AM. we ſailed on a cruiſe.

27. No alteration of the liſt. One complained of a wound who does duty. Indifferent weather.

28. The patient added the 26th, recovered; and the dyſenteric patient returned to duty the 26th, but relapſed; one complained of an old ſtrain, and one of a ſcald:—13 in the liſt.

29. One complained of old eruptions, who does duty. PM. we anchored in le Have harbour. It blew hard in the night.

30. The contuſed patient of the 9th, the dyſenteric patient, one with a ſcald, added the 20th, and one with a ſlight complaint, recovered; one (a marine) complained of a fever, with dyſenteric ſymptoms. Ten on the liſt, viz, two with fevers; one with ſcurvy; one with a conſumption; one with an ophthalmia; two with ſtrains; one of a contuſion; and two of wounds.

OCTOBER.

1. The two with ſtrains, and one with a contuſion, recovered:—7 on the liſt. Our people caught fiſh; they alſo truck'd for potatoes, pumpkins, and milk. We ſailed AM. on our cruiſe.

2. The patient with the fever, added the 30th ult. is recovered:—6 on the liſt.

3. Two complained of fevers; one of them was taken ill ſeveral days ago:—8 on the liſt.

4. The man with the opthalmia is recovered: 7 on the liſt.

5. No alteration of the liſt.

6. One of thoſe who were added the 3d, is recovered; one added with a fever:—7 on the liſt.

7. The other patient who was added on the 3d, is well; one complained of a fever, and one of eruptions:—8 on the liſt.

8. Two added with the dyſentery, one with a fever, and one with the rheumatiſm:—12 on the liſt.

9. One complained laſt night of a fever:—13 on the liſt.

10. One added with a fever:—14 on the liſt. The fever is uncommonly obſtinate.

11. The two patients who complained the 7th, the one with the rheumatiſm on the 8th, and

and the one added the 9th, are recovered; one complained of a fever:—11 on the list.

12. Two added with a fever, and one with a contusion:—14 on the list. PM. we anchored at Halifax; the Pembroke arrived from England.

13. Three complained of fevers, one of them was a wounded patient; the marine who was added on the 6th died of his fever; soon after his decease, many livid blotches appeared on him, particularly on the parts whereon he lay during his illness. The fever patients chiefly complain of their head; they are generally seized with rigours, followed, in some cases, with a vomiting and purging; this, in some, continues. Others are seized with a sickness at the stomach only, but some with costiveness, which continues; all of them loathe their food, and most of them complain of universal and wandering pains:—15 on the list.

14. The contus'd patient of the 12th, well:—14 on the list. The fever patients do not lay in bed in the day; they have very irregular remissions of their complaints.

15. One marine added with the fever:—15 on the list. It is not clear to me where we caught the infection, though, most probably, from the Lizard.—There was an armed brig at Hilsborough, St. John's, while the Lizard lay there, from which the Surgeon of the Lizard

zard thought they got their fever; we had communication with that brig.

16. One marine, and one ſeaman, complained of the fever:—17 on the liſt.

17 The other lame patient added the 19th ult. the one on the 10th, one of thoſe who were added on the 12th, and one of thoſe added the 13th, recovered; one ſeaman and one marine complained laſt night of a fever; one marine added with the piles:—16 on the liſt. The blood of one of the patients added yeſterday is ſizy.—The men were ſerved with freſh beef.

18. No alteration of the liſt. The blood taken from a patient, *who was added the 8th*, was very little ſizy, and of a very looſe texture; the blood of the other patient taken ill yeſterday, was leſs ſo.

19. Two complained laſt night of a fever, one of whom was lately ill of it; and two today, of the ſame diſorder: one of them was ſeized with a bilious vomiting:—20 on the liſt. I applied to the Captain to direct that the ſhip might be ſmoaked with vinegar and gunpowder, which was done, and that ſhe might not be waſhed any more that winter. AM. we ſailed with two ſloops under our convoy.

20. One of thoſe who were added the 13th, and two of them added yeſterday, recovered; one complained of a fever, who had been ill

four

four or five days:—18 on the list. Two of the patients had coughs, and two had fixed pains. Towards the end of the paroxism they complain chiefly of giddiness, and of being light-headed, as they termed it. The blood of one of those added to-day had a thin buff on it; and the crassamentum, though loose in its texture, bore too great a proportion to the serum. Anchored at le Have.

21. The two that were added with the dysentery on the 8th, had the fever, and are well:—16 on the list. The happiest effects have ensued from blisters applied in the beginning of the fever, in many cases; petechiæ appeared on several patients, and are most distinctly seen when they have a sweat on them; their visible duration uncertain. The Captain bought milk for some of the patients.

22. The patient who complained of a fever on the 11th, recovered; three complained last night of the same disorder:—18 on the list. Petechiæ very common among the patients. I applied to have the ship smoaked for an hour only, and it was done. (See October 2.) The men bought potatoes and turnips, and catched fish.

23. A boy added with the fever, complains of a sore throat:—19 on the list. Two of the fever patients have bad coughs; one added the 22d ult. with a slow fever, is hectic: he had

been a long time ailing. AM we ſailed; and PM we anchored again.

24. One of the patients who were added the 12th, one who complained the 18th, PM (ſee 19th) and one of thoſe who complained the 21ſt, PM (ſee 22d) of the fever, recovered. The firſt of theſe three was the patient with the eruptions:—17 on the liſt.

25. The man who was added the 17th with the piles, complained laſt night of a fever. The marine who was added the 15th with the fever, recovered:—16 on the liſt. One of the fever patients was ſeized with the piles. A number of pollock were caught in one of our boats.

26. The boy added with the fever on the 23d recovered:—15 on the liſt. The patients recovering of the fever relapſe from very ſlight cauſes.

27. One of the patients added the 16th, recovered; two added with fevers, one of whom was afflicted with it before. One complained of the itch, a marine, and one of a ſlight contuſion; both capable of doing duty:—16 on the liſt.

28. Yeſterday's relapſed patient recovered; one marine complained laſt night of a fever; his principal complaint was a violent pain in his ſtomach:—16 on the liſt.

29. Two patients, one a marine, complained laſt night, and three this morning, of a fever; the

the two ſeized laſt night complained much of their breaſts:—21 on the liſt. One of thoſe added the 27th was delirious, his tongue black, and his voice altered; one complained of a ſtrain, but does duty.

30. The marine added the 28th, and one of thoſe added yeſterday with fevers, recovered; one complained laſt night of a fever, who returned to duty the 20th, and one is added with a contuſion:—21 on the liſt. The patient with the ſlight contuſion of the 27th, recovered; a number of the men afflicted with ſlight feveriſh ailments, who have not complained. PM. we anchored at Coal Pits.

31. The two that complained the 28th, PM. (ſee the 29th) recovered. The marine who was returned well the 25th, relapſed; one complained of a fever, and the ſtrained patient of the 29th, added:—22 on the liſt, viz. 16 with fevers, 1 conſumptive patient, the boy mentioned the 22d ult. the boy with the ſcurvy, 1 with eruptions, 1 with a contuſion, and 1 with a ſtrain, beſides the patient in the itch. All the relapſed patients are very ill.

NOVEMBER.

1. Two marines, one added the 16th, and one the 17th, and one of thoſe added the 27th

ult. with fevers, recovered; a boy complained of a fever: 20 on the liſt. I applied, and had the ſhip well ſmoaked twice, AM. with vinegar and gunpowder, and PM. with junk and tobacco fires, and with loggerheads quenched in tar. The ſhip was covered every where with a white powder, by the ſmoaking with gunpowder, and ſmelt very ſtrong of ſulphur, as it did of tobacco by the ſecond ſmoaking. Two of our boats were ſent up to Fort Cumberland.

2. The other patient who was added the 16th, the one on the 20th, one of thoſe on the 29th ult. and the boy yeſterday all ill of fevers, with the ſtrained patient added on the 29th, are recovered; one complained laſt night of a fever; —16 on the liſt, beſides the man with the itch, and ſome with coughs. The air was very agreeable laſt night to the men who lay in the tiers; upon every inſpiration I taſted the ſulphur. The boats returned, and brought a little freſh beef on board yeſterday for the Captain and Officers.

3. One who complained on the 31ſt of the fever recovered; one complained of it laſt night, he had been ill four or five days; his worſt complaint was a purging, and he had the piles; his ſtools are porraceous. Several of the fever patients have the ſame kind of ſtools; a number of them have coughs:—16 on the liſt. AM. we ſailed.

4. Two

4. Two complained laſt night of the fever, one of them had a purging, and had been ill a fortnight; the other was taken ill the 30th ult. and one complained of a contuſion of his breaſt from fighting:—19 on the liſt.

5. The man who complained the 29th ult. and the two added yeſterday, with the fever, recovered:—16 on the liſt. The contuſed patient of yeſterday was ſeized with a fever. Off Annapolis, we anchored in the Baſon.

6. The patient added the 2d with a fever, recovered:—15 on the liſt. Fires were lighted in the hatchways. AM. we ſent a boat up to town.

7. The patient who was added the 3d, recovered:—14 on the liſt, beſides the itch patient. AM. we ſailed.

8. One complained of the fever laſt night, who had been ailing a fortnight:—15 on the liſt.

9. No alteration of the ſick liſt. I applied to have fires lighted in the hatchways.

10. Fifteen ſtill on the liſt. We could not light fires in the hatchways. We anchored a little.

11. The relapſed patient added the 30th recovered; the man with the itch added with a cough:—15 on the liſt. One complained of a ſtrain, but does duty.

12. The

12. The patient taken ill the 30th ult. and who was added on the 4th, returned the 5th to duty, relapſed on the 9th, but did not complain until laſt night of a fever; one added with an inflammation in his leg, who had the fever lately:—17 on the liſt. The fever patients are all better, except one, who is very bad. I procured fires to be lighted in the hatchways.

13. The other patient who was added on the 8th ult. with the fever, recovered; one complained of a cold from lying on the booms in the barge, and one of a ſlight wound:—18 on the liſt.

14. The patient added yeſterday with the cold, recovered:—17 on the liſt, beſides the patient afflicted with the itch. Cruizing off the Bay of Fundy.

15. A marine complained laſt night of the fever; both this, and the relapſed patient added the 12th, caught the infection from a marine, recovering of the fever; he had been very ill, and was removed from the ſick birth, back to his own, leſt, as he was very timid, the groans or appearance of the patients in the ſick birth, might frighten him into a relapſe. The patient who was added the 8th, and the one on the 13th with the wound, recovered:—16 on the liſt. The ſtrained patient who did duty, is now well. We could not get the ſhip ſmoaked.

16. The

16. The patient who was added yeſterday to the liſt is very ill; one who had juſt recovered of a ſtrain, got drunk, and brought on his complaint again; another was added to the liſt ill of an inflammation:—18 on the liſt.

17. The man with the piles, added the 25th with the fever; one of thoſe added the 22d, (being ſent on board of a prize) and the yeſterday's ſtrained patient, were ſtruck off the liſt; one complained laſt night of a fever, who was taken ill two days before; he caught it from the ſeamen ſent on board the prize yeſterday; they were meſsmates:—16 on the liſt. We could not get the ſhip ſmoaked.

18. The patient added the 16th with the tumour, recovered; one complained laſt night of the ear-ach, and two of a fever, AM.—18 on the liſt.

19. A boy complained laſt night of a fever, he knew not how long he had been ill; a boy who lay cloſe to him was alſo ſeized with it; one was alſo added with a contuſion:—21 on the liſt.

20. The contuſed patient of the 4th, the one added the 18th with the ear-ach, and yeſterday's contuſed patient, recovered. A marine complained of a fever; he ſucceeded to a birth where two marines, who had had the fever, formerly lay, one of whom died the 13th ult. One added with a contuſion:—20 on the liſt. We fell in with the Lizard; the fever con-

continued to rage on board of that ſhip; one man having died this cruize, and ſeveral before.—They waſh the ſhip, and ſmoak her afterwards for a little time. Eleven are on the ſick liſt, ill of the fever, and ſeveral of the officers have been ſeized with it.

21. The two other patients of the 18th are well; the fever patient (diſmiſſed yeſterday) relapſed again from drinking; and one added with an ulcer.—20 on the liſt.

22. A boy complained of the fever, who was added to the liſt, making 21.—AM. we anchored at Halifax.—The ſick quarters are ſo crouded, that, 'tis ſaid, there is no room for our people:—they are indeed ſhamefully bad quarters.

23. The contuſed patient of the 20th, and the other of yeſterday, are well; the itch patient, beſides having a cough, is ſeized with the fever; and one is added with a wound:—20 bad, beſides my firſt mate, who had an attack of the fever.—Got the ſhip, with the people's bedding, ſmoaked.—The laſt ſupply of neceſſaries being (by means of our ſickneſs) expended almoſt ſix weeks ſooner than the allotted time, I applied for more, but the commiſſioner would not allow any.

24. One complained of a contuſion:—21 on the liſt. The men were ſerved with freſh beef.—

The

The ſhip and bedding ſmoaked again.—My mate recovered.

25. A gentleman, who caught the fever from his meſs-mate, was added to the liſt, making 22.—The fever patients are in a convaleſcent ſtate; but two of them, in particular, are extremely weak.

26. My ſecond mate was ſeized yeſterday with the fever; a boy (who had been lying about without a hammock for two months paſt) complained of the ſame;—24 on the liſt.—Eleven fever patients on the recovery, eight of whom are marines; the conſumptive patient, and he with the diabetes, (or the hectic patient) alſo the boy with a ſevere ſcurvy, and a marine with old eruptions from a venereal cauſe, making in the whole 15, were ſent to the ſick quarters. In a few days all the ſick at quarters are to be removed to George Iſland, whereon a ſort of hoſpital is to be fitted up, and to be attended by a ſurgeon, who had been appointed by Admiral Shuldham ſurgeon to an hoſpital ſhip.—Our ſhip was thoroughly cleaned, waſhed with hot vinegar, and afterward ſmoaked with gun-powder, junk and tobacco, as before.—Every thing was got on deck, the ſick taking all their cloaths with them. After all this trouble, 60 ſupernumeraries were ſent on board of us from the Rainbow; eight of whom had the fever, two

had contuſions, one affected with ſcorbutic ſymptoms, and another with an ulcer.

27. My mate is recovered. One complained of a fever:—7 in the liſt, viz. three with fevers, but not very ill, and four with complaints of lameneſs, beſides ſupernumeraries. Upon my repreſentation of the fatal conſequences to be apprehended to our ſhip's company from the fever among the ſupernumeraries, the Captain applied to the ſenior Officers, and got an order to ſend back all the eight fever patients to the Rainbow: five of them complained of a ſevere pain in their ſide or breaſt, with a cough.—Theſe parts had been hurt by falls not long before, and by lying about on cheſts in the Rainbow.—They had been ſent on board of her from the Pembroke, which they had cleared along-ſide of the wharf, and uſed to go into town, get drunk, and lie in the ſtreets, and in infected houſes; but the ſurgeon of the Rainbow had no ſuſpicion of the infection being on board, and was ſurpriſed to hear it.—Her men were afterwards very ſickly, as I was informed.

28. One complained of a rheumatiſm, to which he was ſubject, eſpecially in foggy weather:—8 on the liſt, beſides the four lame ſupernumeraries:—ſcrubbed all hammocks.—— PM. we weighed, and anchored off Major's Beach.

29.

29. The patient added on the 24th is well.—One complained of a cough:—8 on the liſt. One ſupernumerary was added laſt night with a contuſion; five of them are ill.

30. One complained laſt night of a ſtrain, and another was added with rheumatic pains, and a third with a fever, who meſſes with the patient added the 27th, making 11 on the ſick liſt: viz. four with fevers, two with the rheumatiſm, one with a cough, three with ulcers, and one with a ſtrain: beſides five ſupernumeraries, viz. one with ſcorbutic ſymptoms, three with contuſions, and one with an ulcer. Could not get the ſhip ſmoaked.

DECEMBER.

1. The patients added the 26th and 27th ult. and the two rheumatic patients, recovered:—7 in the liſt. The two contuſed ſupernumeraries of the 26th are recovered; three of the others remain ill.—I could not get the ſhip ſmoaked.

2. The boy added on the 26th, and another with a cough, on the 29th ult. are well:—5 remain on the liſt. One ſupernumerary, who complained laſt night of the fever, is recovered; three of them are ſtill ill; one of them, with the

ulcer has fractured his clavicle lately, and another has an old rupture.—Squally weather with ſnow.

3. The boy relapſed laſt night; he has an inguinal rupture of a conſiderable ſtanding, which he never mentioned before:—6 on the liſt. I got the ſhip ſmoaked for a ſhort time.

4. A boy added with an abſceſs:—7 on the liſt, beſides the three ſupernumeraries.

5. No alteration of the liſt. The ruptured ſupernumerary diſmiſſed.

6. One complained of the fever; he had lately been expoſed a day and a night to rain, in aſſiſting to get off a tranſport that had run a-ground:—8 in the liſt. One ſupernumerary complained laſt night of the fever; three of them are now ill. Sailed, AM. with the Amazon, Scarborough, and 34 tranſports, to New-York.

7. A marine, who attended the ſick before they went to quarters, complained of the fever: 9 in the liſt, beſides the ſupernumeraries.

8. Laſt night three complained of the fever; two of them relapſed. The boy added the 26th ult. is well:—11 in the liſt. The ſupernumerary who was added the 6th, is well; two complained laſt night of the fever; four more of them are now ill.—The fever patients complain much of chillneſs, and are dejected; the pulſe is neither very quick nor full; the tongue is whitiſh, and they complain a little of thirſt;

three

three of thoſe added laſt have bad coughs, and one of them was at firſt ſeized with a ſyncope.

9. A marine complained laſt night of a fever; one added with a wound, and another with an old ſtrain:—14 in the ſick liſt. One of the ſupernumeraries added yeſterday, is well; one complained of the fever, and one of the rheumatiſm; 5 are now ill. A gale of wind.

10. The ſtrained patient added the 30th ult. and who had the rheumatiſm, is well. Laſt night one was added with the fever, and another with a contuſion:—15 in the liſt. A ſupernumerary, (an old man) who had lately had a cough, complained of the fever; 6 ſupernumeraries are ill. The gale continues. Loſt company of the Scarborough and many of the tranſports.

11. One complained of the fever, who had it before, and one of a fracture:—17 on the liſt.

12. One of thoſe added on the 8th, and another on the 18th, with fevers, are well; one complained of a fever, and two of contuſions:—18 on the liſt. The rheumatic ſupernumerary of the 9th is well. One (from meſſing with the gentleman who had the fever) was ſeized with it laſt night, and another AM. 7 ill.

13. The patient of the 6th, and one of thoſe (a marine) who was added on the 8th, with fevers are well; one complained of the fever;—17 on the ſick liſt. The fever ſupernumerary of

of the 9th is well; 6 of them are ill. PM. the Beverly brig, one of the convoy, made a ſignal of diſtreſs; being extremely leaky, the people were taken out of her, and ſent on board of different ſhips; an officer, with ſixteen ſoldiers, three women, and their children, were brought on board of us.

14. A marine complained laſt night of the fever; and one added AM. with a contuſion: 19 on the ſick liſt. One of the ſupernumeraries who was added on the 8th, and one on the 12th with fevers, are well; four remain ſick. A gale of wind.

15. One of the contuſed patients of the 12th, and one of the 13th, are well; the marine who was returned well the 13th, complained of the rheumatiſm:—18 in the ſick liſt. A gale of wind.

16. One of the patients with an old ulcer, one added the 8th, with a fever, another of the 10th, with a contuſion, and the contuſed patient of the 14th, are well; one complained of the fever:—15 on the liſt. Two ſupernumeraries added laſt night with the fever, and another, AM. with an ulcer; 7 of them are ill. One of the ſoldiers complained of a ſcrophula. A gale of wind.

17. The boy added on the 4th, and the marine on the 7th, are well; one complained laſt night of the fever, and one AM. of a ſtrain:—

15

15 in the ſick liſt. The ſupernumeraries who were added yeſterday, are well; two more added with contuſions.

18. Two complained laſt night, and one AM. of the fever:—18 in the liſt. One ſupernumerary, returned well the 14th, complained of a cough; 8 of them are ill, beſides the ſoldier. The Amazon parted company with us, taking one ſhip, that had money on board, under her convoy. A gale of wind.

19. The patient added the 12th, and one of the 17th, with fevers, are well; one complained of a rheumatiſm, to which he is ſubject, and another of a contuſion:—18 ill. No other alteration. Very bad weather.

20. The fever patient of the 14th, and one with a ſtrain of the 17th, are well; a marine, who ſome time before had been ill of the fever, relapſed:—17 on the liſt. The worſt complaint among the fever patients at preſent, is a harraſſing cough. The ſupernumerary added the 16th with an ulcer, is recovered; 7 of them are ill, beſides the ſoldier.

21. The patient of the 15th recovered; one who had been put in an infected birth, was ſeized with the fever:—17 on the liſt; but no other alteration. By enquiring of the fever patients, I eaſily find by what means they contract infection. We have had very bad weather, inceſſant lightning, and a heavy ſea; the deck where the people

ple lay is very wet, and the air hot and diſagreeable, from the hatches being batooned down; numbers of the ſick are wet in their hammocs, from water running down upon them; and being ſo crouded with people, the ſick birth is not only ſmall, but in a bad place.

22. The rheumatic patient of the 19th is well; one complained of a ſtrain:—17 in the liſt. One ſupernumerary added with the fever; 8 are ill, beſides the ſoldier.

23. Two complained laſt night of the fever: 19 on the liſt. I applied to have the ſhip ſmoaked; but the decks were waſhed, and fires made afterwards between decks.

24. The patient added the 22d is recovered; a marine complained laſt night of the fever, and another of an habitual rheumatiſm:—20 in the ſick liſt. One of the ſupernumeraries added with the rheumatiſm; 9, beſides the ſoldier, ill. Fires were lighted in the hatchways.

25. One added with an habitual rheumatiſm:—21 on the liſt. The ſupernumerary added the 22d, is well; one complained of a cough and rheumatiſm, and one rheumatic patient was ſeized with the fever; 9 are ill beſides the ſoldier. Fires were lighted in the hatchways.

26. The marine added the 23d is well; one added with an abſceſs:—21 on the liſt. The ruptured ſupernumerary complained; 10 ill.—One ſoldier complained of an abſceſs, and an habitual

habitual flux; 2 ill. PM. the other man, who was added on the 23d, died of his fever, delirious; he was remarkably dejected from his being firſt ſeized, and continued ſo. Very bad weather.

27. A marine, added the 28th with a fever, and the patient of the 25th, recovered; ſix complained of fevers laſt night:—24 in the liſt, 14 of which are fever patients. Two of the rheumatic ſupernumeraries have fevers. The ſick birth ſmelt ſo offenſively, that we were obliged to have it ſmoaked to-day.

28. The patient added the 21ſt is well; two, (one of them a marine) complained laſt night of the fever:—25 on the liſt beſides the ſupernumeraries. Fires were lighted in the hatches, and the ſick birth ſmoaked and cleaned.

29. One of the contuſed patients of the 12th, and the patient of the 26th, are recovered; one complained laſt night of the fever:—24 in the whole. The ſupernumerary of the 18th recovered, and one complained of the belly-ach; 10 ill beſides the ſoldiers. The ſick birth was again cleaned and ſmoaked.

30. The marine added the 24th, and two of the patients added the 27th, recovered; one complained of a fever, another of a rheumatiſm, and a third of an inflammation:—24 in all. The ſupernumerary added yeſterday recovered, but PM. he was ſeized with the fever. No other

alteration. The ſick birth was again cleaned and ſmoaked.

31. One patient added the 18th, one of the 27th, one of the 29th, and another of yeſterday, with fevers, are recovered; a marine who lay between two fever patients, complained laſt night, and two this morning of the fever:—23 in the liſt, viz. fourteen with fevers, chiefly in a convaleſcent ſtate, two with the rheumatiſm, one with a fracture, one with a ſtrain, one with a contuſion, one with an inflammation, one with a wound, and two with foul ulcers. The ſupernumerary added yeſterday is well; nine remain ſick, viz. five with fevers, two with the rheumatiſm, (one of whom does duty) one with a rupture, one with contuſion, and one with an ulcer. Two ſoldiers, one with the ſcrophula, the other with an habitual flux:—35 in all. 9 PM. we arrived at Sandy-Hook. Lighted fires in the hatchways, and cleaned the ſick birth.

JANUARY, 1777.

1. Two (one, the marine who had a ſtrain) complained laſt night, and two this morning of fevers; two added with old coughs:—28 in the liſt. Two ſupernumeraries added with fevers, one with an old cough, one with the ſcurvy, and another with the rheumatiſm; 14 ill. A paſſenger in the cabin, who caught the infection from

from Capt. Dalrymple's ſervants, complained of the fever; 45 in all, including the two ſoldiers. Sailed up, and anchored off New York. Lord How commands, but is very ill. Cleaned the ſick birth well.

2. Sent twelve fever patients, chiefly in a convaleſcent ſtate, to the hoſpital at Brooklyn, Long-Iſland; one of thoſe added the 27th, and another of the 29th, with fevers, are recovered; three complained of the fever, one of them is a ſervant of the Captain's, who had been ill before, and another has a contuſion, making 18 in the whole. Three ſupernumeraries ſent to the hoſpital with fevers; one added with a contuſion, making 13 ill, beſides the paſſenger and ſoldiers. Fires in the hatchways.

3. Sent four with fevers, the patient with the punctured wound, whoſe hand was inflamed, and another with a bad ulcer, to the hoſpital:—12 on the ſick liſt. Three ſupernumeraries with fevers, and the ſcorbutic patient were ſent to the hoſpital; 9 ill beſides the paſſenger. The ſoldiers and women were landed; the ſhip well cleaned, waſhed with vinegar, and afterwards dried with fires.

4. Sent one of thoſe added on the 2d with a fever, to the hoſpital; a patient of the 31ſt ult. and another of the 1ſt, with fevers, are well, as alſo the rheumatic patient of the 24th ult.—8 in the ſick liſt. Fires were lighted. Froſt.

5. My ſecond mate was again ſeized with the fever laſt night:—9 on the liſt. Two ſupernumeraries complained, one of a ſcald, the other of an inflammation; 11 bad. Spruce beer ſerved to the ſhip's company.

6. One added with an inflammation:—10 on the liſt. Three ſupernumeraries added with fevers; 14 bad.

7. One added with the rheumatiſm, making 11 on the liſt. The ſupernumerary added the 5th, with an inflammation, recovered; 13 ill.

8. The patient of the 30th ult. with an inflammation, recovered:—10 on the liſt. The paſſenger is well; but no other alteration.—I am informed that the phyſician of the hoſpital thinks there is nothing the matter with our fever patients. It is true moſt of them ſent the firſt day were in a convaleſcent ſtate.

9. The patient with the fracture, added the 11th ult. one of thoſe with a cough on the 1ſt, and my mate, are recovered. Sent the boy with the rupture to the hoſpital:—6 in the liſt. Sent ſix of the ſupernumeraries to the hoſpital; viz. two with the rheumatiſm, one with a cough, one with a fever and rupture, one with an ulcer, and another with a contuſion; 7 of them ill yet.

10. The other man, added the 1ſt inſt. with a cough, another of the 6th, are well; a marine, who had the fever twice before, was ſeized laſt night with it, and another this morning.—6 in the

the liſt. Sent ſix of the ſupernumeraries to the hoſpital; viz. two with the rheumatiſm, one with a cough, one with a fever and a rupture, one with an ulcer, and one with a contuſion; 7 of them remain ill.

10. One man added the 1ſt with a cough, and another on the 6th, are well; a marine, who had the fever twice before, had a relapſe laſt night, and one this morning.—6 in the liſt. Two ſupernumeraries complained of the fever; 9 of them are now ill. Two of them have the ſcurvy, tho' one of them does duty. The thermometer being placed on deck, ſtood at 25.

11. One of yeſterday's patients is recovered; one complained of a ſore throat, and one of a contuſion:—7 are ill. Two of the ſupernumeraries added on the 6th, do duty; one is added with a ſcorbutic lumbago; 8 of them are ill, one of whom has the ſcurvy. Sent the marine, who was added yeſterday, to the hoſpital.

12. Two complained of nephritic ſymptoms: 8 on the liſt, beſides the ſupernumeraries.—— Many of the men get drunk every day with New-England rum.

13. Yeſterday's patients are recovered; three are ſeized with fevers, a ſwelling about the glands of the face and throat, but they complain chiefly of their heads, and deafneſs; three added with coughs, and one with dyſenteric ſymptoms:—13 on the liſt. One of the contuſed ſupernumeraries,

ries, who was added the 17th ult. and has ſince been ſeized with the rheumatiſm, is recovered; one complained of the fever, one of a cough, and one is relapſed into the ſcurvy; 10 of them are now ill.

14. One of the patients added yeſterday, died of his fever at 3 AM. how long he had been ill before he complained, I know not; the other two were ſent to the hoſpital; one complained of a contuſion:—11 in the ſick liſt. One of the ſupernumeraries added on the 6th, one of thoſe on the 10th with fevers, one on the 11th, and yeſterday's fever patient, are recovered; 6 of them remain ill. The Flora arrived from Halifax; three of the men we ſent to ſick quarters; there came in her the boy who was ſo ill of the ſcurvy, and two others. The gentleman and two of the men, who were put on board one of our prizes, were loſt by the prize being run aſhore near the light-houſe there; the other two were ſaved, and came in the Flora. Some more of our men, who were on board of another prize, came in her. Our ſhip was haled alongſide of a wharf, and moored out of the ſtream of ice.

15. The contuſed patient of the 11th, and one who was added the 13th with a cough, recovered; two added with the fever, (one of whom came in the Flora) one with a contuſion, and the ſcorbutic boy with weakneſs:—16 in the

the liſt; three of the ſupernumeraries who were ill having entered for the ſhip. One ſupernumerary complained of a cough; four of them now ill.

16. The patient added the 2d with a contuſion, and the other with dyſenteric ſymptoms, are recovered; one complained of a ſuppreſſion of urine, and two more of the ailing ſupernumeraries entered for the ſhip:—17 in the liſt. One ſupernumerary recovered, and one ſtill remains ill

17. The rheumatic patient of the 30th ult. and the fever patient of the 15th, who came from the Flora, recovered; one complained of the fever, and one of the rheumatiſm, who had it lately:—17 on the liſt. The contuſed patient added the 14th, is ill of the fever.—No other alteration.

18. Sent the patient added the 16th, and one yeſterday with a fever, to the hoſpital; alſo one ſcorbutic patient, formerly a ſupernumerary, was ſent to the hoſpital ſhip; one complained of a cough:—15 in the liſt. Sent the ſcorbutic ſupernumerary to the hoſpital ſhip; one complained of a cough. Very cold.

19. Sent two patients to the hoſpital with ſevere fevers; viz. a ſupernumerary added on the 10th, but ſince entered for the ſhip, and one with a contuſion; a fever patient of the 15th is recovered:

recovered:—12 remain on the liſt. No other alteration. Smoaked the ſhip.

20. The carpenter added with the fever, and another with ſcorbutic ſymptoms, making 14 on the liſt. One of the patients added the 13th with a cough, is ſeized with a fever. No other alteration. Smoaked the ſhip.

21. Sent three with fevers to the hoſpital; one of them was added the 13th with a cough, another on the 18th, and one, lately entered, who complained laſt night. The patient of the 11th, with a ſore throat, and the ſupernumerary of the 15th with a cough, are recovered. The patient ſent the 3d to the hoſpital, with the inflammation, was ſent back laſt night for irregularity:—11 on the ſick liſt. The ſhip was waſhed, againſt my inclination, but though fires were lighted afterwards between decks, they cannot dry the ſhip thoroughly. 9 PM. was an alarm of fire aſhore, but it was ſoon extinguiſhed. When the thermometer was at 52, there was a fire in the gun-room.

22. Three who were returned from the hoſpital on the 20th, are again added with fevers, and two other men complained:—16 in the liſt. The ſupernumerary is recovered; and here I muſt obſerve, that the diſtinction between the ſhip's company and ſupernumeraries will be no longer obſerved. Fires were lighted in the hatchways, and ſome *ſp. ſalis* evaporated between

'tween decks. The ſhip's company employed in waſhing their cloaths.

23. The ſcalded patient of the 5th is well; and the ſcorbutic patient of the 20th is ſent to the hoſpital-ſhip; one complained of a cough, and a drunken fellow, of the fever:—16 in the liſt. The men employed as yeſterday; lighted fires.

24. Yeſterday's fever patient is well; one who lately had a cough, complained of the fever: 16 in the liſt. A very dirty bad day.

25. Two complained laſt night of fevers, one of whom had a cough:—18 in the liſt.

26. The patient added the 23d with a cough, does duty; one added with a cough, and one with a fever:—19 in the liſt.

27. One rheumatic patient, who returned from the hoſpital, where, he ſays, he got nothing for it, was added to the liſt, making 20 in the whole. Laſt night there was a falſe alarm of fire on ſhore.

28. The one added on the 24th with the fever, is recovered, but has ſcalded his wriſt; one complained of excoriations:—21 in the liſt.

29. A patient who returned from the hoſpital on the 20th, and complained the 22d, and one of his meſſmates who was infected by him, and complained on the 25th, were ſent to the hoſpital; I believe both of them have been irregular

gular; the patient added the 26th was alſo ſent to the hoſpital. One added the 15th with a contuſion, and yeſterday's ſcalded patient, are recovered; one added with indigeſtion, one with an inflammation, and one complained of chilblains:—18 in the liſt.

30. The carpenter, who was added the 20th, recovered; one complained of a contuſion, and one of a head-ach, who is not on the liſt:—18 in all.

31. The patient added the 26th with a cough, had the fever, and is diſcharged; one added with the fever;—18 in the liſt; viz. four with fevers, three with the rheumatiſm, one with the ſcurvy, (ſeized with indigeſtion); two with inflammation; three with contuſions, one with a furuncle, one with excoriations, one with chilblains, one with an ulcer, and one weak patient, beſides one with the head-ach.—The ſhip was haled into the ſtream, and 54 priſoners were ſent on board of us from a priſon ſhip.

FEBRUARY.

1. Three marines, (one of them with an inflammation) and one ſeaman who attended the ſick, complained laſt night of the fever; the contuſed patient of the 30th is diſcharged, and the other patient of the 30th is recovered; one complained of the fever:—21 in the liſt.

2. The

2. The contuſed patient of the 2d ult. had the fever, and is recovered; and the marine with inflammation, added yeſterday with a fever, is recovered, as alſo the one with chilblains; one of our men died at the hoſpital laſt night, he was ſent there the 29th; one of his meſſ-mates, upon hearing it complained of the fever; four returned from the hoſpital laſt night, one of them added to the liſt, who is very weak, and not free of the fever; one yeſterday, with an old rheumatiſm, making, in all, 22 in the liſt.—— Sailed and anchored PM. near Hell-gates, that is between the Continent and Long-iſland.

3. The patient with an inflammation, of the 21ſt; one with an inflammation of the 29th ult. one of the marines added the 1ſt, and yeſterday's frightened patient, recovered; one complained of a relapſe of the fever, and another of a cough, who was at the hoſpital:—20 in the liſt. Sailed through Hell gates.

4. Two marines complained of coughs; one of a rheumatiſm, one of a ſtrain, and one of an ulcer:—25 in the liſt. PM. we anchored off Gardener's Iſland.

5. The frightened patient relapſed again laſt night; the officer of marines, and the gunner added with the fever, and one with the ſcurvy:—29 in the liſt. PM. we anchored at Rhode-Iſland. Sir Peter Parker commands.

6. One of thoſe added the 22d ult. and the ſeaman of the 1ſt, with fevers, are recovered, as alſo one added the 4th with a ſtrain; five complained laſt night of the fever; one is the officer of marines' ſon, who got it by ſleeping with his father; and another of them caught it from a ſick meſſmate:—31 in the liſt. The patient added the 29th ult. with indigeſtion, is very ill of the ſcurvy; a ſingular caſe. The ſpruce beer is out—ſerved grog to the ſhip's company.

7. One added the 30th ult. and one of thoſe yeſterday, are recovered of their fevers; two complained laſt night of the fever:—31 are on the liſt.

8. The other marine, added on the 1ſt with a fever, one added the 4th with a rheumatiſm, the frightened patient of the 5th, and two of thoſe added the 6th, are recovered; one added with a ſcald, and another with a contuſion:—28 in the liſt. All the priſoners, except nine of them who were Engliſh and Iriſh, were ſent on board a cartel, and ſix of thoſe are very ill of the ſcurvy.

9. One of the hoſpital patients, added the 22d ult. one on the third with a cough, another on the 4th, and one on the 6th, are recovered; two complained of fevers, and one of the belly-ach; the ſix men added with the ſcurvy. PM. ſent one man who was very ill of the ſcurvy, and two of the remaining ſix to ſick quarters:—30 in the liſt.

10. The

10. The patient of the 27th ult. and one added on the 6th, are recovered; two added with fevers, one of whom had it twice before, and relapſed laſt night, the other is a marine:—30 in the liſt. A pretence is made, whence it originates I know not, that more of our ſick cannot be accommodated at ſick quarters aſhore, though in fact they are not half full. Very bad weather.

11. Two added with the fever laſt night, one of them a marine, who has had it four times, and one added this morning with the fever; one with the ſcurvy, and one with a rupture, making 35 in the liſt, five of whom, marines, got cold by lying under the half-deck while the priſoners were on board. PM. I was obliged to remove my thermometer to my cabin; an exceeding ſtormy day. A goat, which will make four dinners, was killed for the ſick.

12. The gunner added the 4th, one added the 9th, and one of yeſterday, (all fever patients) and yeſterday's patient with a rupture, are recovered; three added with fevers, one of whom is often ill, and one with a rheumatiſm, making 35 in the whole.

13. One added the 13th ult. with a fever, who had alſo an obſtinate ſwelling on the left ſide of his head, one of the 9th, one of the 11th, and one of yeſterday, all fever patients, recovered; one added with fever, one with nephritic ſymptoms,

toms, and a third with an habitual rheumatiſm: —34 on the liſt. We ſailed on a cruiſe.

14. The one added on the 10th with a fever, is recovered; five added with fevers, three of whom have coughs, making 38 in the liſt. The ſick-birth changed from a-midſhips to the ſtarboard ſide of the main hatchway; it is cleaned and ſmoaked as often as the weather permits.—The ſtarboard bay, where the priſoners were confined, though it has been well cleaned, and ſmoked with gunpowder, ſtill retains a very diſagreeable ſmell.

15. One of thoſe added the 12th, is well; one complained of a contuſion and fever laſt night; the man who had the excoriations, is ſeized with the fever:—38 in the liſt. PM. we anchored at Block-Iſland.

16. The patient with nephritic ſymptoms, added the 13th, is well; two added with coughs: —37 in the liſt. We ſailed again.

17. The patient added on the 10th of Nov. with an ulcer, and one of the fever patients added the 12th, are well; two added with a relapſe of the fever, (one a marine) making 37 in the liſt.——The Captain gave a ſheep to the ſick.

18. The patient added the 7th, and one of thoſe of the 16th, are recovered; one added with froſt-bit toes, and an old rheumatic patient with a fever:

a fever:—37 ill. The ſick-birth cleaned as often as the weather will permit.

19. One of the marines added the 4th, one on the 5th, and another the 11th with the ſcurvy, and one on the 17th, are recovered; ſix added with fevers, making 39 in the liſt. We got ſome oranges and limes out of a prize ſloop from Hiſpaniola, for the uſe of the ſick.

20. The other marine added the 4th, and one of yeſterday's patients, are recovered; three added with coughs and ſore throats, and one with a ſcald:—41 in the ſick liſt. PM. very cold; anchored at Block-Iſland.

21. Two of the fever patients added the 14th, one of them a marine, the other marine added the 17th, and one of them added yeſterday, is recovered. The patient with the ulcer, who recovered the 17th, cut his leg again by getting drunk yeſterday, and has now had a bad ulcer; one complained of ſcorbutic ſymptoms, and another of an excoriation, making 40 in the liſt. Laſt night was by much the coldeſt we have had during the winter; in my cabin, in the cock-pit, the thermometer was 26. This morning we ſailed.

22. The patient added the third, the ſcalded patient on the 18th, the marine on the 10th, one on the 2d with the rheumatiſm, one of thoſe on the 16th, one of the 19th, and two with coughs,

coughs of the 20th, are recovered; two complained of fevers:—34 in the liſt.

23. One added the 14th, and one of yeſterday's fever patients, recovered; three, (one of them a boy) complained laſt night of the fever; one added with a contuſion, and one with excoriations:—37 in the liſt. One who was ſeized with feveriſh ſymptoms laſt night, recovered.

24. The other patient added the 22d, is recovered; two with fevers, of whom had ſeveral relapſes, added to the liſt, making 38 in all, beſides ſome with colds, who do duty.——Bad weather.

25. The patients added the 21ſt, and one of the fever patients on the 23d, are well: one complained of the belly-ache, one of a rheumatiſm, and two of contuſions:—39 in the liſt, and a number ailing who do duty.

26. One with contuſions, and another with excoriations, added the 23d, and one of yeſterday's contuſed patients, are recovered; four complained of fevers, and one of a contuſion:—41 in the ſick liſt. The ſhip was cleaned. PM. one of them added the 19th, died of his fever: he is the 4th who has died of it. We ſpoke with the Orpheus, having a prize. I hear they have ſeventy on their ſick liſt, chiefly with fevers, which they caught, it ſeems, from ſome priſoners whom they had on board. I have ſince been told by the ſurgeon, that they loſt twelve or thirteen

thirteen on board, and a good many at ſick quarters, by this fever. He did not uſe the bark.

27. One of the 17th ult. with a rheumatiſm, one added the 9th, the frequently-ailing marine of the 11th, one of the 24th, a contuſed patient of the 25th, and one of yeſterday's fever patients are recovered; one complained of a fever, whoſe meſſmate had it lately, one with a furuncle, and one of a ſcald, making 38 in the whole. Fires were lighted in the hatchways.

28. The patient added the 9th with the belly-ach, one of thoſe added on the 19th, and one on the 26th, with a contuſion, are recovered; two added with the fever, and one with an inflamed arm, making 38 in all:—viz. ſixteen with the fever, ſeven with the ſcurvy, three with rheumatiſm, one with a bad cough, one with the belly-ach, one with the ear-ach, one froſt-bit, one with excoriations, one wounded, one with inflammation, and two with furuncles.

MARCH.

1. One of thoſe added the 19th, one with a belly-ache on the 25th, and one of thoſe with fevers on the 26th ult. are recovered; four complained of fevers, (one of them a relapſed patient) and two of the rheumatiſm, who are ſubject to it:—41 in the liſt.

2. One who had a furuncle, and was ſeized the 1ſt ult. with a fever, is recovered; one complained of a fever:—41 in the liſt. One of the ſcorbutic patients, who was a priſoner, has ſevere froſt-bit toes, but did not complain of them before.

3. One of the marines added the 4th, one of the fever patients of the 26th, the two furuncle patients, and two of the fever patients added the 1ſt, are recovered; one complained laſt night of a fever, one of a diabetes, one of a contuſion, and one of an ulcer, making 39 in the liſt. We ſpoke with the Orpheus, whoſe people are ſtill very ſickly.

4. The patient added the ſeccond, who came from the hoſpital, and one with an inflammation on the 28th ult. are recovered; three complained of fevers, one of ſcorbutic ſymptoms, and one of the furuncle patients, who returned to duty yeſterday, is relapſed, making 42 in the liſt. PM. anchored at Block-Iſland.

5. One of thoſe added the 22d of January, who had been at the hoſpital, and has had ſeveral relapſes ſince, one added the ſecond, one with the diabetes of the third, and one of thoſe who were added yeſterday with the fever, recovered; one complained of the fever:—39 in the liſt. PM. the Orpheus went into Rhode-Iſland. The inhabitants brought off a little freſh ſtock, potatoes, beet roots, and eggs.

6. One

6. One of the patients added the 19th ult. and one of yeſterday, are recovered; one complained of an inflammation, making 38 in the whole. PM. we ſtood towards Rhode-Iſland to get a bullock, ſome fowls and potatoes. Every thing very dear.

7. One who meſſes with two fever patients was ſeized with it, and one complained of a contuſed knee:—40 in the liſt. The Captain ordered freſh broth for fifteen of the worſt of the ſick people, who could uſe it; and the purſer ſerved a number of the ſick with freſh beef in lieu of grog, which I had ſtopped.

8. One of the ſcorbutic patients added the 9th, one of the fever patients of the 28th ult. one of thoſe of the 4th, and the furuncle patient are recovered; five complained of fevers, making 41 in the liſt. The Captain ordered broth again for the ſick.

9. One of the ſcorbutic patients added Jan. 18, with the fever, the three rheumatic patients (one of Jan. 26, and the other two of the firſt inſt. one of thoſe added the 5th, the other the 27th ult. with fevers, one of the fever patients of the 1ſt, and one of the 4th, are recovered; one complained of a bad cough, and one of a fever who has been ill five days, and came out of the prize Weſt-India ſloop:—35 in the liſt.

10. One of the ſcorbutic patients of the 9th, one added the 22d with a fever, one on the 27th

ult. with a ſcald, and one on the third with a contuſion, recovered; one complained laſt night of the fever, and another of a ſcorbutic ſwelled ancle to which he is ſubject, making 33 on the liſt.

11. The patient added the 1ſt, and one of the 8th with fevers, and one of the 9th with a bad cough, are recovered; one complained of a fever, one with giddineſs, and one with the ear-ach: —33 in the liſt.

12. A marine who has been frequently ill before, and was added the 24th ult. with the fever, the fever patient of the 7th, and yeſterday's patient with giddineſs, are recovered; one complained laſt night of the fever, making 31 in the liſt. PM. the priſoner added the 9th died of his fever in a violent delirium; he had had the diſorder on board the ſloop, and was five days ill before he complained to me. This is the 5th patient who has died of the fever; petechiæ are very common among the fever patients.

13. The patient added the 6th, the ſcorbutic one on the 10th, and one with the ear-ach on the 11th, are recovered; a marine added with a foul ulcer:—28 on the liſt.

14. A patient of the 14th ult. who has had the ſcurvy ſince he recovered of his fever, and one added the 8th, are well; one complained laſt night of the fever, one had a return of a bad cough, and another, ſubject to the rheumatiſm,

is

is added with the ſcurvy :—19 in the liſt, beſides two froſt-bit and one ulcered, (priſoners) brought out of a prize ; a quantity of onions were alſo brought from the prize, and ſerved out to all the ſhip's company. PM. we anchored at Rhode-Iſland, and ſent 17 men to ſick quarters, viz. one with a bad cough, one old rheumatic patient, three ſcorbutic, one of whom was froſt-bitten, a boy added the 8th with a fever, and the patient with excoriations.

15. The patient added the 12th is recovered ; one complained of the fever, he attends the ſick, and is frequently infected :—22 in the liſt.—The priſoners were ſent on board the Chatham.

16. The fever patient of the 11th recovered ; one added with the fever who lately came from ſick quarters, and had been ſent there from one of the prizes, ill of a fever :—22 in the liſt. The Greyhound and Orpheus went up the river.

17. The rheumatic patient added the 25th ult. and one on the 15th from attending the ſick, recovered ; two complained of fevers :—22 in the liſt. We ſailed in company with the Lark, and anchored PM. at Block-Iſland.

18. One added the 19th ult. and one of yeſterday's patients are recovered :—20 in the liſt. AM. we ſailed, and PM. we run a ſloop aſhore ; the Lark ſtood in pretty near to her afterwards, and we followed, both firing a conſiderable time

at

at her and two guns, from whence the rebels fired at us, without hurting either of us; but one of our men, by ramming home a wad and cartridge without the gun being ſpunged, had both his hands blown off, his arms broke and much lacerated, and his face greatly burnt by the gun going off in the mean time. Both arms were neceſſarily amputated above the elbows. The fever patient of the 14th died PM. he was addicted to drinking. He is the 6th who died of the fever.

19. The froſt-bit patient added the 14th, and one of the fever patients of the 28th ult. recovered; one complained yeſterday of a head-ach, and another this morning of the fever:—20 in the liſt. The ſick-birth is cleaned and ſmoaked every good day.——We anchored off Plum-Iſland.

20. One complained of the rheumatiſm, two of the ſcurvy, one of an ear-ach, to which three of them are ſubject:—24 in the liſt. We anchored AM. at Shelter-Iſland.

21. One complained laſt night of the fever, making 25 in the liſt. Employed wooding and watering the ſhip. No ſtock to be got worthy of notice.

22. The fever patient of the 7th, one of the 8th, one of the 17th, two of the 19th, one with the rheumatiſm, and another with the ear-ach, of the

the 20th, are recovered; two complained of the fever, one of a bad cough:—21 in the ſick liſt.

23. The wounded patient died this morning of his wounds, and one of the ſcorbutic patients of the 20th recovered; one complained laſt night of the fever;—20 in the liſt.

24. One added the 14th ult. and one of the fever patients of the 22d, recovered; a black complained of the fever laſt night, and another man this morning, and one of a contuſion, making 21 in the liſt.

25. One complained laſt night of the fever: 22 on the liſt, five of them with very bad fevers. The contuſed patient of the 25th is well.

26. Two were added with indigeſtion, from eating raw *clams* or *hens* unwaſhed, laſt night; ſeveral others complained from the ſame cauſe, who were not added to the liſt, and were all relieved by vomits:—23 in the ſick liſt. Twenty-nine Americans made their eſcape in a ſmall boat from Connecticut, and came on board of us, to be ſent to New-York to enter as volunteers in one of the Royal American corps. After getting ſome victuals and drink, they were ſent aſhore to one of our foraging parties at Long-Iſland. The Captain and the Officers gave the ſick two ſheep.

27. The patients added yeſterday are well.—one added with the fever, who had it very ſeverely before, and one with excoriations, making

ing 23 on the liſt. AM. ſailed, and PM. arrived at Rhode-Iſland.

28. One added the 26th ult. one of the 21ſt, another of the 22d, and two of the 24th, were ſent to ſick quarters with violent fevers:—18 in the liſt.

29. The patient of the 27th with a fever, is well:—17 in the liſt.

30. One complained of froſt-bit toes:—18 in the liſt. Sailed about ſix or ſeven miles up the harbour between Rhode-Iſland and Prudence, to relieve the Centurion.

41. The patient added the 16th is recovered; one complained of a ſcorbutic ſwelled leg, making 18 in the liſt. PM. a ſick ſupernumerary was ſent with the reſt of them on board the Centurion. The 17 ſick are, ſix with fevers, four with the ſcurvy, one with a bad cough, one with froſt-bit toes, one with a ſcald, one with excoriations, and three with ulcers. Our boat rows guard in the night.

APRIL.

1. The patient with the cough, and another with excoriations, are recovered; yeſterday's recovered patient is relapſed, and two added with fevers, who have likewiſe relaped, making 18 in the liſt.

2. The

2. The fever patient of the 23d, and one with froſt-bit toes of the 30th ult. are recovered: 16 in the liſt. We began to dig a garden yeſterday on the iſland of Prudence, and to ſow ſome ſeeds. No inhabitants on it.

3. The patient added the 8th of Feb. with a contuſion, and ſeized on the 11th ult. with a fever, and one of thoſe added the 1ſt, are recovered; a marine complained of a relapſe of the fever laſt night:—15 in the liſt. One of our men ſent from a prize to ſick quarters with the fever. The Centurion went down.

4. One of the ulcer patients, who was added the 21ſt ult. with a wound, another of the 1ſt, and yeſterday's patient, are recovered; one added to the liſt with a fever, making 13 in all.

5. The man added the 20th of Feb. with a ſcalded foot, is recovered:—12 in the liſt.

6. Two (one of them a marine) complained of the fever, both of whom had it before:—14 in the liſt. The convaleſcents were ſent aſhore to walk, and the ſhip waſhed.

7. No alteration of the ſick liſt. I wanted to have a tent erected on ſhore for the ſick, but the Captain would not conſent to it, but allows the convaleſcents to go a-ſhore to walk when the weather permits. Their mutton is all expended. They have portable ſoup with onions.

8. One of the patients added the 6th is recovered; three added with fevers, and one with an inflammation:—17 in the ſick liſt.

9. One of the ſcorbutic patients of the 20th, another of the 25th ult. and one of yeſterday's fever patients, are recovered; one added with an inflammation, from cutting his nail too cloſe:—15 in the liſt.

10. Two complained of the fever, one of a bad cough, and one with lethargic or plethoric ſymptoms, making 19 in the liſt. A very wet fog.

11. The marine added the 13th ult. and the relapſed patient of the firſt, (formerly a ſupernumerary) are recovered; one who lately had the fever, is relapſed, and another with a ſore throat added, making 19 in the liſt. Some portable ſoup ſent on board for the ſhip's company. I adviſed 4lb. of it to be diſſolved every banian-day in the peaſe-ſoup.

12 The fever patients of the 8th, another fever, and the lethargic patient of the 10th, and yeſterday's fever patient, are recovered:—15 in the liſt. The patient added the 10th with a cough is ſeized with a fever. The people like their peaſe with the ſoup.

13. One patient of the 6th, a fever patient of the 8th, and two others of the 10th, recovered:—12 in the liſt.

14. One

14. One complained laſt night of the fever, one of the head-ach, and one of an inflammation:—15 in the liſt. One of the ſcorbutic patients ſeized with the fever.

15. The patient of the 11th with a ſore throat, is well; one complained laſt night of the fever:—15 in the liſt. I hear the men on board of other ſhips will not eat their peaſe with the ſoup. I ſuppoſe too much of it is boiled in them.

16. The patient added the 10th ult. and one of the 14th with the head-ach, are recovered; one complained of a relapſe of the fever, and another of ſcorbutic ſymptoms:—15 on the liſt.

17. One added the 2d, and one on the 31ſt ult. and yeſterday's fever patient, are recovered; one complained of the fever and an inflammation: 13 in the ſick liſt.

18. A boy complained of the fever laſt night, one of a ſore throat, and one of a ſlight wound:—16 in the liſt.

19. No alteration of the liſt. The patient of the 13th is very ill.

20. The one added the 10th with a bad cough, and one of the 18th with a ſlight wound, recovered:—14 on the liſt.

21. No alteration.

22. The patient added on the 9th is well:—13 on the liſt.

23. One complained of ſcorbutic ſymptoms laſt night:—14 in the liſt.

24. Two added with the fever, making 16 in the liſt. One of the patients added this day, has been ailing ſince he came from New-York hoſpital. PM. the patient added the 15th died of the fever. This is the 7th who has died of the fever.

25. One of the 17th is well; one complained of ſcorbutic ſymptoms:—15 in the liſt.

26. One complained of a contuſed wound, and another of an inflamed finger, making 17 in the liſt.

27. The fever patient of the 4th, and one of the 23d, are recovered; two added with fevers: 17 in the liſt.

28. No alteration.

29. Seventeen in the liſt. I am informed that two more of our people were ſent with fevers from the prize to ſick quarters.

30. Two fever patients ſent to ſick quarters. The patient added the 25th is well; one of the ſcorbutic men (a Black, an irregular fellow) returned from ſick quarters as bad as when he went, and added to the liſt:—15 in it, viz. five with the fever, four with the ſcurvy, one with a ſore throat, three with inflammations from different cauſes, one with a contuſed wound, and one with an ulcer.

MAY.

MAY.

1. The boy with the ſcurvy, who was added the 2d of Auguſt ult. and was ſince in ſick quarters at Halifax, the boy with the ulcer of the 3d, one with a fever on the 8th of March, one with an inflammation on the 8th, and one of the 27th ult. are recovered; two complained of the fever, one of whom had it lately, and one of the rheumatiſm:—13 in the liſt. Laſt night the gentleman who had charge of the prize went to ſick quarters, and died this day of the fever.

2. No alteration.

3. Thirteen ſtill in the liſt.

4. Two (one a marine) added to the liſt with fevers, making 15.

5. One of thoſe added on the 6th, and another on the 24th ult. are well; one complained of an abſceſs:—14 in the liſt.

6. One added the 16th with ſcorbutic ſymptoms, and one the 18th ult. with a ſore throat, are recovered:—12 in the liſt.

7. One of the 1ſt, with a fever, is well; one added with a fever and inflammation:—12 in the liſt.

8. No alteration.

9. The patient of the 5th is recovered:—11 in the liſt.

10. The

10. The boy added on the 8th ult. though pretty well recovered, has relapſed, and is ſent to ſick quarters; one is added with a relapſe of the fever:—11 in the liſt.

11. One complained of the fever, making 12 in the liſt.

12. Two added with fevers, one of whom has had ſeveral relapſes:—14 in the liſt.

13. The patient added the 11th, the two of yeſterday, and the Black with the ſcurvy, were ſent to ſick quarters:—10 in the liſt.

14. The other fever patient of the 1ſt is well; one complained of a contuſion:—10 in the liſt.

15. A man who lay cloſe to the ſick birth, complained of the fever, and was added, making 11 in the liſt.

16. The other patient of the 27th ult. and one of the 14th, are recovered:—9 remaining on the liſt.

17. The patient added the 10th is well:—8 in the liſt. The ſhip was moved more than a mile farther up.

18. The rheumatic patient of the firſt is recovered; another added with the fever:—8 in the liſt.

19. No alteration in the liſt.——I applied to the Captain to cauſe oxylapathum, dandelion, tops of wild peaſe, &c. to be gathered, and boiled every banian-day among the peaſe for the ſhip's company.

20. One

20. One complained of the fever:—9 in the liſt. Plenty of mint, muſtard, ſorrel, and lamb's quarter, (as it is vulgarly called) to be gathered aſhore, which are well cleaned, and boiled with the peaſe.

21. One complained of the belly-ach, and one of the tooth-ach:—11 in the liſt.

22. One complained of a very bad ulcer in his leg:—12 in the liſt. The men are very fond of their peaſe with the ſoup and greens among them.

23. The marine fever patient of the 4th, ſent to ſick quarters, and one of the 21ſt are recovered:—9 in the liſt. Theſe two days paſt the NW wind has burnt and withered every thing aſhore amazingly. A hot day.

24. The patient of the 20th ult. of an inflammation, is recovered:—8 in the liſt. Some four croute ſent on board for the ſhip's company; half a pound of which is to be ſerved to each man, to eat with their ſalt beef on Tueſdays and Saturdays while it laſts.

25. One complained of an inflamed foot:—9 in the liſt.

26. Four with fevers (two of whom, one a boy, had it before) added to the liſt, making 13.—They have all different ſymptoms who were added to-day.

27. One of the 15th recovered; another had a relapſe of the fever:—13 on the liſt.

28. The

28. The patient of the 20th, one of the 25th, another of the 26th, and one added yeſterday, are recovered; one complained of a ſore throat who had it lately, and of furuncles:—10 in the liſt. The northerly winds have done much miſchief to the fruit-trees, &c. aſhore.

29. No alteration of the liſt. At noon, being relieved by the Diamond, we dropped down the harbour, and anchored.

30. The patient added the 14th ult. with an inflammation, and one of the 18th are recovered:—8 on the liſt.

31. One of thoſe added the 26th is well:—7 on the liſt, viz. three with fevers, one with a wound, and two with ulcers.——Anchored at New-Port. Some porter ſent on board for the ſick, from the agent victualler. Eight of our men brought on board from ſick quarters.

JUNE.

1. The patient with a wound, added the 26th of April, one added on the 4th, and another the 26th ult. recovered; the patient with the ſore throat, diſcharged; one complained of a whitloe:—4 in the liſt.

2. Two of the eight who came from the hoſpital the 31ſt ult. are added to the ſick liſt with ſcorbutic ſymptoms, making 6 in all. Thoſe who have had the fever of late, have been ſeized

ſeized with ſcorbutic ſymptoms, in their convaleſcent ſtate. PM. we ſailed in company with the Amazon and Orpheus on a cruize, and the three ſhips' companies agreed *viva voce* to ſhare prize money.

3. One complained laſt night of the fever :—7 in the liſt. A very wet fog.

4. The patient added the 26th ult. is recovered ; two added laſt night with the fever :—8 in the liſt.

5. The patient added the 7th, another of the 22d ult. and one of the 1ſt, are recovered :—5 in the liſt.

6. The patient of the 4th is recovered ; two, one of whom came from a prize, complained laſt night of a fever :—6 in the liſt.

7. One of the patients added the 2d, and one of the 4th, are recovered ; one complained laſt night of an hæmorrhage from the noſe, making 5 in the liſt.

8. The patient of the third, and one of the 5th recovered ; one added with a fever laſt night, who came from ſick quarters the 30th ult.—4 in the liſt.

9. One added laſt night with a contuſion :—5 in the liſt. Caught a few fiſh.

10. The patient added the 8th, recovered ; one complained of the fever—5 in the liſt.—Caught ſome fiſh. Very wet fogs.

11. The hæmorrhage patient of the 7th is recovered:—4 in the ſick liſt. We caught a few fiſh.

12. The patient of the 9th is well; one with a wound, one with a contuſion laſt night, and one with ſcorbutic blotches, who was formerly very ill of the ſcurvy and ſent to ſick quarters, added to the liſt, making 6 in all.

13. One added with a wound, and a boy with a relapſe of the fever:—8 in the liſt. Very wet fogs.

14. One complained of a ſtrain, making 9 in the liſt.

15. Laſt night a patient was ſeized with an epilepſy, who is ſubject to it; another was added with a fever:—11 in the liſt. We caught a few cod.

16. The other patient of the 6th, one of the 10th, the wounded patient of the 13th, and yeſterday's fever patient, recovered; a boy, who came from ſick quarters the 13th ult. relapſed with the fever; one complained of indigeſtion, from eating fiſh, and two with ſlight wounds:—11 in the liſt.

17. Yeſterday's patient with indigeſtion, is recovered:—10 in the liſt.

18 The wounded patient of the 12th, and the two of the 10th, recovered ſo far as to do duty:—7 in the liſt.

19. No

19. No alteration in the ſick liſt.

20. No alteration.

21. The contuſed patient of the 12th, and the boy of the 16th, are recovered:—5 remaining on the liſt.

22. No alteration.

23. The epileptic patient has had the fever, and recovered:—4 in the liſt.

24. No alteration of the liſt. PM. a ſquall of wind blew remarkably hot off the land.

25. Four in the liſt. We caught a number of mackrel.

26. The other patient added the 2d, and the patient of the 14th, recovered; a marine ſeized yeſterday with the fever:—3 in the liſt.

27. The marine is recovered; one complained of an ulcer:—3 in the liſt. The laſt of the people's portable ſoup is made uſe of. PM. we anchored in Cape Cod Bay.

28. No alteration of the liſt. We moved and anchored in Cape Cod Harbour. Our water-caſks were ſent aſhore to be filled, and a corporal with ſix marines from each ſhip, and a marine officer to command them in the night, were ſent to guard the caſks.

29. The ſcorbutic patient of the 12th is recovered:—2 in the liſt.——Some fiſhermen live about this place, from whom we got a few fiſh for the ſhip's company.

30. No

30. No alteration of the liſt. The two ſick are, the boy who was added the 13th with the fever, and another on the 27th with an ulcer.

SECT. III.

MONTHLY REVIEW OF THE SICK LIST,

From Sept. 1, 1776, *'till June* 30, 1777.

SEPTEMBER.

THE ſick liſt varied little, but often, until the middle of the month, when it decreaſed: it afterwards increaſed, though ſlowly, until the 24th, then varied a little, and decreaſed the laſt day.

The patients who complained were, four with fevers, two with head-achs, ſixteen with the dyſentery, one with the belly-ach, one with an opothalmia, one with hæmorrhoides, one with eruptions, one with a ſcald-head, three with ſtrains, two with contuſions, three with wounds, one with a ſwelling of the knee, and one with a furuncle.—In all 37.

OCTOBER.

OCTOBER.

The fever patient who was taken ill the 22d ult. (a puny boy who had been returned to duty the 19th only) after having been in the liſt about three weeks.—He complained much of his head at firſt, and in two days after a flux for a week together, with his head-ach, which weakened him ſo much, that it was a fortnight before he recovered. When he complained on the 22d, it was of a bad cough, head-ach, and pain of his ſide; and after this fever, which held him for eight or ten days, he was ſeized with a diarrhœa and diabetes from weakneſs, of which he did not recover for as many weeks.

The fever made its appearance on the 15th of September, the third day after we arrived at Halifax; a young man, who belonged to a boat at that time, and therefore was probably on board the Lizard and aſhore at Halifax, was taken with an ague, he ſaid; but fortunately he ſoon got well: and even before him there were two had ſlight attacks of it. Some dyſenteric patients intervened between this man's being taken ill, and the recovery of the boy before-mentioned on the 19th, and his falling ill again on the 22d. I was ſurprized to find him ſo long

in

in recovering, as I gave him the bark not very ſparingly. There was another man ſeized with it on the 22d, who recovered perfectly well the 26th.

The ſhip's barber was the next perſon ſeized with it on the 3d; his attack was not violent, and being a tipling young lad, he went about the ſhip five or ſix days before he complained, leſt his grog ſhould have been ſtopped. He ſoon recovered.

Another young man, of a delicate conſtitution, complained of the fever the ſame day the barber did. He was very often ailing, but he luckily got quite well in a few days.

The next perſon was a marine, much given to drinking, and had frequently got drunk with ſmall beer; he was much bloated, of an indolent diſpoſition. Not long before this, he had a fit of drinking: he died the 8th day of his illneſs. I was much alarmed at ſeeing, on ſeveral parts of his body, a few hours after he died, large black blotches, particularly in thoſe parts he had lain upon. None of the ſymptoms were running high, and he being naturally of a very ſlothful diſpoſition, I did not apprehend that he was in any danger. His caſe will be related hereafter. On this occaſion, I was the more uneaſy, becauſe the ſymptoms about the other fever patients were more obſtinate than thoſe which had appeared in former months. Theſe circumſtances

ſtances left me no room to doubt but that we had caught a virulent infection. I cannot determine whether we caught it on board of the Lizard, or at St. John's, or at Halifax, for the fever exiſted in, and we had communication at all the three places in a few days. One thing is certain, that wherever it was contracted, the debauch which our people committed on the 15th of September, ſoon rouſed it into violent action. From a very healthy ſtate, we were ſuddenly plunged into a very ſickly and dangerous one. Thirty-nine complained of fevers, two of the dyſentery, one of the rheumatiſm, two of hæmorrhoides, one of eruptions, one of the itch, one of a ſtrain, and three of contuſions.—Fifty in all.

The method in which the fever was treated, will be related in its proper place. None of the other complaints required any particular treatment.

NOVEMBER.

A good deal of pains was taken to clean and ſmoak the ſhip in different ways, the firſt of this month, with larger fires of junk and tobacco, than were generally made uſe of afterwards. To this precaution alone can be attributed the viſible check which was given to the fever: there being a decreaſe of no leſs than fifteen patients in the

the courſe of the month; and all who were in the liſt did well. The fact is ſo clear and inconteſtible, that nothing further need be ſaid in favour of ſmoaking with large fires for three or four hours at a time, when a ſhip becomes ſickly; nor of frequently repeating this proceſs, at leaſt as often as circumſtances will admit.—The ſick themſelves not only found the air more cool and refreſhing after ſmoaking, but thoſe in health, who lay in the tiers and more confined places of the ſhip, ſaid it was like a change of climate to them, ſo cool and agreeable the air was rendered. But it is likewiſe to be remembered, that the ſick were treated with bark.

On the 26th, the ſick, or rather convaleſcents, were ſent aſhore at Halifax, with all their cloaths, ſolely with an intention to get the ſhip cleared of the infection. Indeed, no other motive could have juſtified ſending people to ſuch quarters. Of all the neſts of filth combined with poverty, which I ever beheld, they were by far the moſt ſhameful. Where, or on whom this reproach falls, I know not; but what renders it indelible, is, that Halifax had never been moleſted by the rebels, and conſequently there were no concurring circumſtances to make it neceſſary to coop up the ſick and wounded ſeamen, in the moſt filthy and decayed houſe about town, with ſcarce a ſquare of glaſs in a window.

As

As to their victualling, they were left to the mercy of an old woman and her daughter, who farmed that part of the *dirty* buſineſs, I muſt call it.

As ſoon as they were ſent aſhore, the ſhip was cleaned and ſmoaked with as much care as before, and we flattered ourſelves that by repetitions of this proceſs, we ſhould be able to ſubdue the infection entirely; but, to our great mortification, ſixty ſupernumeraries were ſent on board in the evening from the Rainbow, eight of whom had the ſame jail, hoſpital, or ſhip fever; and there was no time to get an order to ſend them back that night.

Beſides eight ſupernumeraries ill of fevers, who were ſent back to the Rainbow next day, 24 were added to the liſt this month with fevers, one with ſcurvy, two with rheumatiſm, three with coughs, one with the ear-ach, one with hæmorrhoides, three with ſtrains, ſix with contuſions, two with wounds, two with inflammations, and two with ulcers:—in all 47.

I have nothing in particular to obſerve at preſent with reſpect to the manner in which thoſe men were treated.

DECEMBER.

Only five were added with the fever the firſt week; one or more were added every day in the ſecond week; and in the remaining part, excepting the 15th, 19th, and 26th, one or more complained of it daily. But if the ſtate of the weather, and the ſhip's being ſo much crouded on the paſſage from Halifax to New-York, be conſidered, it will not be thought ſurpriſing that we had one patient died, and ſuch an increaſe of the ſick liſt at the end of the month. On the laſt of November there were only 16 in it, including ſupernumeraries; and on the laſt of this month there were 35 in it; but the fever patients were then chiefly in a convaleſcent ſtate, though they were liable to relapſe from inattention, or the leaſt irregularity. There were 49 fever patients, one with a dyſentery, one with the belly-ach, nine with the rheumatiſm, one with a ſcrophula, one with a cough, one froſt-bitten, two with ruptures, ſix with contuſions, two with fractures, two with wounds, two with inflammation, three with abſceſſes, and one of an ulcer.—In all 83.

The ſymptoms of the fever were vehement this month, and were very obſtinate, particularly the delirium. It was incident to thoſe who complained

plained of the rheumatiſm, and they, when ill of it, ſtood more in need of cordials than of evacuations. The reſt of the patients were treated after the uſual manner.

The paſſage to New-York was extremely diſagreeable, from the length of time we were on it, the badneſs of the weather, the great number on board, and our being ſo ſickly. The ſick being unavoidably ſo ill accommodated in their births, rendered it ſtill worſe. We had ſometimes three different gales of wind in the four-and-twenty hours.

JANUARY, 1777.

For the firſt nine days, excepting the 1ſt, 2d, and 5th, no fever patients complained. It may be obſerved, that the more ſick we had on board, the more patients we had daily complaining.—*Query*, if this might not proceed from the following cauſes:—Might not ſo many people as we had on board on the paſſage, crouded into ſo ſmall a ſpace, contribute to this?—When in ſuch a ſituation there are a number of ſick in a ſhip, will not the infection daily acquire more virulence?—And, under theſe circumſtances, will not thoſe who are obliged to paſs and re-paſs often in the courſe of twenty-four hours, by the ſick-birth, be very apt to be affected by the ſight of the ſick, as well as by the infection?—That the wet decks, and the people lying in wet

mocs, (from the upper works of the ſhip being leaky) contributed thereto, no perſon will doubt.

Through the remaining part of the month, the men were taken ill nearly every other day; but in order to get rid of the infection, they were ſent to the hoſpital ſoon after they complained, and a great deal of pains taken to keep the ſhip clean. Our people were very irregular this month. The ſhip being very near a wharf, and they having received a little prize money, it was all laid out in New-England new rum.—Whether the patient who died on the 14th, in ſo ſhort a time as thirty-nine hours after being ſeized with the fever, had drank any of that abominable new ſpirit, I know not for a certainty, though I ſuſpect he had. His caſe will be related in its proper place.

The patients that were added to the ſick liſt, were, forty with fevers, one with a head-ach, one with dyſenteric ſymptoms, one with indigeſtion, ſeven with the ſcurvy, five with rheumatiſm, two with ſore throats, nine with coughs, three with nephritic ſymptoms, one froſt-bit, one with a ſcald, ſix with contuſions, one with inflammation, one with an abſceſs, one with a furuncle, and one with excoriations.—In all 81:

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FEBRUARY.

This was the moſt ſickly month we had in America; a greater number of fever patients being added to the liſt in the courſe of it, than in any other. Yet only one patient (a ſupernumerary who came from the Rainbow) died. Although the priſoners were on board of us only nine days, it cannot be doubted but that by their crouding the ſhip while they were on board, they promoted or increaſed the ſickneſs. One of them died on board, without my being informed of his illneſs, until a few hours before he died. From what accounts I could hear of him, he was in ſome meaſure ſtarved from want of cloaths and bedding. But as the priſon ſhip from whence they came was ſickly, as I was informed, it is more than probable that he was infected before he left her; and on board of the Juno they were neceſſarily crouded together into the ſtarboard bay, where he had a wet deck only to lay upon. That part of the ſhip was unavoidably wet by the cables; and the bay had an offenſive ſmell for a conſiderable time after they were ſent away, though well cleaned and ſmoaked. While theſe poor creatures were on board, our marines lay under the half-deck, where

where they caught cold, and were ſeized with the fever.

The winds being generally northerly, the weather was very cold with ſnow. Every day, excepting the 4th, 8th, 16th, 20th, 21ſt, and 25th, fever patients were added to the liſt, to the number of 61, beſides one with the head-ach, two with belly-ach, nine with ſcurvy, five with rheumatiſm, three with ſore throats, five with coughs, one with nephritic ſymptoms, one froſt-bit, three with ſcalds, one with ſtrain, two with ruptures, ſix with contuſions, one with an inflammation, one with a furuncle, two with excoriations, and two with ulcers.—106 in all.

An urgent cough, with ſevere head-ach, were the moſt frequent and troubleſome ſymptoms of the fever this month. No fever patients were ſent to ſick quarters, but one from a prize.

MARCH.

The number of ſick were greatly diminiſhed this month, but ſtill the majority of thoſe who complained were fever patients, viz. 34; beſides two of indigeſtion, ſix of the ſcurvy, three of the rheumatiſm, three of coughs, two of the ear-ach, one of giddineſs, one of a diabetes, four froſt-bit, three of contuſions, one of a wound, two of inflammations, one of furuncles, one of an

an excoriation, and three of ulcers:—in all 67. One of the fever patients died on the 12th, and another on the 18th; the former was the priſoner from the ſloop, who had been ſo long ill before he complained. Irregular people ſuffered greatly more than others in the fever, in them the ſymptoms were more ſevere, and the relapſes more frequent. But I obſerved exceptions to this rule; for under the diſadvantages of irregularity, the utmoſt degree of filthineſs and nakedneſs, and of having a cheſt only to lie upon, without bedding, I have ſeen them recover: and what is rather extraordinary, the young, raw, dirty lads from Scotland, who had been but a ſhort time at ſea, were ſeldom ſeized with it. The man who was blown up or wounded on the 18th, died on the 23d. It was ſome time (perhaps a quarter of an hour) after the accident, before he recovered any motion or ſenſe, or felt any conſiderable pain, and continued delirious throughout the night.

Three fever patients were ſent to ſick quarters on the 28th. For the firſt five days fever patients were daily added; but on the 6th, 7th, 13th, 18th, 20th, and 26th, no fever patients complained, nor through the remainder of the month, excepting the 27th; ſo that by far the greateſt number were added before the 18th, after which the infection began to decreaſe very obviouſly. This could proceed from nothing

elſe

elſe but our firing ſo much on the 18th,* which not only ſmoaked the ſhip thoroughly, but alſo the men and their cloaths, which never could be done in the uſual way of ſmoaking. The fact is clear, whatever conjectures may be formed on it, as appears by the daily ſtate of the ſick liſt ever after. Yet nothing but accidental circumſtances can procure to a ſickly ſhip's company ſuch a beneficial ſmoaking; as the expences attending the conſumption of ſo much powder as we fired that day, would be too great. But it may therefore be ſaid, with ſeeming propriety, that little advantage can be derived from this being known, unleſs it could be put in practice. I think, however, that this being inculcated on board of a ſickly ſhip, when coming to action, may be an additional inducement to them to perform their duty with becoming ſpirit.

APRIL.

Northerly winds were the moſt prevalent this month, conſequently the weather was rather cold and unpleaſant, though we had but little rain. It was of ſome benefit to the convaleſcents that they were allowed to walk aſhore now and then; but a good ſick tent erected on ſhore, would have been of much more benefit, not only to all the ſick, but to the ſhip's company in general; as

* See pages 71 and 72.

as we might thereby, probably, have been able to have entirely *ſmoaked* out the infection.

The ſick continued to decreaſe in number on the liſt, and the greateſt number of the fever patients were added to it before the 19th, viz. on the 1ſt, 3d, 4th, 6th, 8th, 10th, 11th, 14th, 15th, 16th, 17th, 18th, 24th, and 27th. On the 24th, one died, who, I believe, came from the Rainbow. Two men* were ſent to ſick quarters with the fever from a prize, and two from the ſhip on the 30th. All the patients of this month were 27 with fevers, one of a phlethora, one of a dyſentery, four of the ſcurvy, two of ſore throats, one of a cough, two of wounds, and ſix of inflammations:—in all 44.

The moſt obſtinate ſymptoms of the fever this month, were the head-ach, univerſal pains, and cough. The delirium was very urgent in that caſe which proved fatal.

MAY.

We now became daily more and more healthy. Only 28 patients complained the whole month: viz. 19 of fevers, one of the belly-ach, two of

* Neither thoſe men, nor any ſent from prizes, were under my care. They are only mentioned as men belonging to the ſhip, who had the fever.

the rheumatiſm, one of a ſore throat, one of a contuſion, one of inflammation, one of an abſceſs, one of a furuncle, and one of an ulcer.

The weather, though ſomewhat backward, was upon the whole temperate. The winds were moſtly between SE and NE The NW on the 22d and 23d did much miſchief, as has been already obſerved, and likewiſe on the 28th.

The ſymptoms of the fever were now much milder; the head-ach, with pains in the limbs, as the patients expreſſed themſelves, were moſt troubleſome.

The gentleman went the 30th ult. from the prize to ſick quarters, where he died the 1ſt inſt. He had of late, I was informed, lived very irregularly, and was ſubject to complaints of his breaſt from a hurt which he formerly received. Five were ſent this month with fevers to ſick quarters.

Our people, particularly thoſe who were ſcorbutic, received benefit from walking aſhore; as well as from the portable ſoup and greens being boiled among their peaſe, and from the crout.

JUNE.

We had very little bad weather at ſea this month, it being chiefly mild, but the atmoſphere was

was either foggy, or in general very hazy. The ſhip's company caught a great many fiſh, and they had their ſoup as uſual while it laſted, with croute, twice a week. Under theſe circumſtances the ſick liſt continued to decreaſe as to fevers, to the great ſatisfaction of every perſon on board. Only twelve complained of fevers, one of indigeſtion, three of ſcurvy, one of hæmorrhage, one of an epilepſy, one of a ſtrain, two of contuſions, four of wounds, one of an abſceſs, and one of an ulcer:—27 in all.

The head-ach was the moſt troubleſome ſymptom among the fever patients.

CHAP. III.

Monthly Review of the Sick List,

From July 1, 1777, 'till July 30, 1778, with meteorological Observations, and remarkable Occurrences

July.

THE winds were variable, blowing moderately from every point of the compaſs in the courſe of the month. It was very ſeldom calm, tho' little rain fell, and that only on ſeven days of the month; the atmoſphere was generally hazy, foggy, or cloudy. On the 2d, 3d, and 4th, heavy dews: on the 5th, 9th, 17th, and 20th, light ſhowers, 22d, 23d, and 29th, ſhowers, the rain fell on the 5th and 17th with thunder and lightning, 22d with lightning, and 29th with thunder. Mean height of the thermometer about 65; new moon 4th, full moon 20th.

The ſick liſt increaſed from three to nine in the courſe of the month; there were added to it in all ſeven with fevers, the ſymptoms of which were become milder; one with a head-ach, one with dyſenteric ſymptoms, two with belly-achs, one with vomiting, three with indigeſtion, ſix with the ſcurvy, two with rheumatiſm, one with

by

hypochondria, one with worms (aſcarides), one with eruptions, two with ſtrains, one with hydrocele, one with a contuſion, three with inflammation, and one with an ulcer:—in all 34.

On the 26th a caſk of molaſſes was taken out of a prize for each of the three ſhips companies, and eight caſks of limes were divided among them; indeed the Orpheus had one half of the limes, as her people were the moſt ſickly with the fever and ſcurvy. I got 18 bottles of ſmall French wine for the uſe of the ſick.

On the 28th, I put three gallons of lime juice and ſix of molaſſes in 18 gallons of rum, (but, by miſtake, the ſteward put in more rum than I directed) to be ſerved, when diluted with water, to the ſcorbutic people, in the room of grog.

On the 31ſt we got a little ſtock out of a prize, which was divided among the three ſhips.

The porter was ſerved out to the ſhip's company, as a free gift, a pint a day to each man.—A priſoner, who came from the molaſſes veſſel, complained of an inflamed eye. He ſaid it proceeded from the ſteam of the molaſſes, when ſtarting it out of one caſk into another about a fortnight before; and that all the men who were employed about that buſineſs, were affected in the ſame manner.

One of our men died the 25th, of his fever, at ſick quarters.

AUGUST.

The wind was variable and very moderate, but more from the S. than any other quarter, 'till the 26th, when it came N. and continued ſo, but was ſtill moderate until the 31ſt. It rained the 2d, with *t* and *l*, 3d, light ſhowers, 5th, ſhowers, 10th, 11th, 12th, 13th and 14th, *l*, 15th, *t*, *l*, and ſhowers, 17th, 18th, 19th, and 20th, light ſhowers, 23d, *l*, 26th, ſhowers, 27th, light ſhowers. The atmoſphere in general was hazy and cloudy, but the 6th, 7th, and 8th we had fogs. New moon the 3d, and full moon 18th. The thermometer was never lower than 68, nor higher than 78.

The ſick liſt varied a little, but continued rather increaſing until the 12th. On the 13th we arrived at Rhode-Iſland;—the people of the Orpheus continued ſickly all the voyage. The dyſentery began now to attack the people. I ſent to ſick quarters on the 14th, one with a fever, three with fluxes, one with a bad cough, and three with the ſcurvy. From the 14th the liſt varied frequently until the end of the month.—On the 28th, one with a dyſentery, one with a vomica, and one with a hydrocele, were ſent to ſick quarters. A third part of the ſhip's company

pany were ſent in their turns aſhore, to walk and gather apples, when the ſhip's duty and the weather permitted. On the 15th we anchored up the harbour, off Prudence.

The patients who complained were, nine of fevers, one of a pleuriſy, five of a dyſentery, one of a vomiting, one of indigeſtion, three of the ſcurvy, one of the rheumatiſm, one of hypochondria, one of a vomica, one of a cough, one of eruptions, one of a ſtrain, two of contuſions, two of inflammations, one of an abſceſs, one of a furuncle, and one of ulcers:—in all 33.

There were no unuſual ſymptoms either among the fever or dyſenteric patients.

SEPTEMBER.

Northerly and NE winds were moſt prevalent; ſome days they were variable, ſeldom calm, and always moderate; 6th, 7th, and 10th, light ſhowers, 17th, ſhowers, 18th, hard ſhowers, 19th light ſhowers, 21ſt, *t*, 22d, light ſhowers, 23d ſhowers, 26th, light ſhowers. The atmoſphere was generally cloudy, ſometimes clear, and very ſeldom hazy. New moon the 1ſt, and full moon the 17th. The mean height of the thermometer was about 66.

The ſick liſt varied little, but rather increaſed all the month with dyſenteric patients, one of whom

whom died on the 19th; but the fever with petechiæ accompanied his flux. Nothing uncommon happened in the dyſentery. On the 4th, a corporal and two marines were ſhot, and one wounded aſhore by the rebels; while they were guarding the watering party, above 200 rebels attacked the corporal and ſix marines, the boats crew, a midſhipman, and the cooper. On the 12th, a man was killed by a fall from the main-top.

Five patients were added with the fever, fifteen with the dyſentry, one with a ſore throat, five with contuſions, two with wounds, and two with furuncles:—30 in all. On the 14th, ſent one of the fever patients to ſick quarters.

OCTOBER.

Northerly winds prevailed more than the Southerly; 1ſt, 2d, 25th, and 26th were calm, but theſe calms were not throughout the whole day; it was moſtly moderate, and ſometimes variable. On the 18th, 27th, 28th, and 29th, gales; 9th, ſhowers, 13th, 18th, 21ſt, 24th, 25th, 26th, 27th, and 29th, light ſhowers; 28th, heavy rain. The atmoſphere was generally hazy or cloudy: new moon the 1ſt, full moon 15th. The mean height of the thermometer was about 60. From the 22d to the end, the weather became cold.

The

The ſick liſt rather increaſed all the month, the dyſentery ſtill prevailing On the 1ſt, four were ſent to ſick quarters with the dyſentery, and one with the fever; one died of the flux the 10th, and two, with the dyſentery, were ſent to ſick quarters. The dyſentery was very obſtinate, but there was nothing unuſual among the fever patients. Nine were added with the fever, fourteen with the dyſentery, one with the cholera morbus, two with the rheumatiſm, one with a ſore throat, three with contuſions, one with inflammation, and one with an abſceſs:—in all 32.

NOVEMBER.

For the firſt four or five days, the wind was Southerly and Weſterly, (though it froze on the 1ſt) and then came round to the Northward, varying, with rain, and fixed for two days in the NW with freſh gales. It blew Southerly again for one day, then returned to the N and NW for three days with rain; veered again for a ſhort time to the SW, and gradually came back to the WNW, W, and NW for ten days, with froſt and ſome ſnow, blowing ſtrong at times. From the SW it blew freſh one day, varied, became Northerly, then Southerly and Weſterly—NW again—variable and Eaſterly with ſtrong gales. The 12th, 13th, 17th, and 18th, gales, 29th,

ſtrong gales, 22d and 23d, ſhort calms, 6th, heavy rain, 5th, 8th, 9th, 10th, 22d, 26th, 29th, 30th, light ſhowers. The atmoſphere was generally cloudy or hazy. The moon was full the 14th, and changed the 29th. The mean height of the thermometer was about 46.

On the 18th we dropped down to New Port; 23d ſailed with a convoy, and returned next day. 27th ſailed again, and anchored at Block-Iſland PM.—28th ſailed with a convoy towards Sandy Hook; 29th, they were all diſperſed by the gale of wind. The Diamond, Flora, and Lark were out on a cruiſe, and got very ſickly from the bad weather, and from infection communicated by priſoners taken out of the prizes. The ſmall-pox was on board the laſt.

The ſick liſt varied very little, but towards the end of the month it was increaſed by hurt patients. This was the healthieſt month we enjoyed in America while the Juno exiſted; only twenty-one patients having complained, viz. one of a fever, one of a head-ach, two of the dyſentery, one of the rheumatiſm, one of a palpitation of the heart, one of a cough, two of ſcalds, ſix of contuſions, two of wounds, three of inflammations, and one of a furuncle.

Two with the rheumatiſm, and one with a ſcald head, were ſent to ſick quarters on the 19th, and one on the 26th with the fever.

This was an agreeable change for the better. Our men were very ſeldom aſhore, and only at firſt

firſt, when we went up to Prudence; and the weather was far colder in February laſt than it was in this month. On the 21ſt, ſix of our men, who had been taken priſoners the 4th of Sept. returned in a flag of truce, and another of them eſcaped out of priſon. When they came on board, I got them well waſhed with warm water, then with warm vinegar, and got clean cloaths put on them. Afterwards I gave each of them of Huxham's *Tinct. of Bark*, ℥i. *Tartar emet.* gr.¼ and *Aq. ſimp.* ℥iß.

DECEMBER.

The wind was chiefly from WSW to NE, and, unleſs in the beginning of the month, when it blew ſtrong gales, was commonly moderate.—The 2d and 15th light ſhowers, 29th, gales. We had only nine days without froſt, and ſnow fell on four days only. The atmoſphere was oftener cloudy and hazy, than quite clear:—13th, 17th, 18th, 27th, and 29th, light ſhowers. Full moon the 14th, new moon the 29th:—it was very cold about the end of the month. The mean height of the thermometer was about 44.

We returned to New-Port the 7th; our ſick liſt increaſed until the 19th, and all the week following decreaſed, and from the 27th until the end of the month, increaſed. A fever pa-

tient was ſent to ſick quarters the 12th, and another fever and one dyſenteric patient on the 27th. Query. Did the increaſe of fever and dyſenteric patients proceed from the blowing weather at the end of the laſt, and beginning of this month?—our hatches being then batooned down. On the morning of the 30th, every thing on board which the wind blew upon, had the appearance of being caſed over with ice, it having rained, hailed, ſnowed, and froze in the night.—The ſhip's decks were very leaky, many of the men were wet in their hammocs, and a great deal of water was between decks. Moſt of the fever patients were lying in the bays, where the air is moſt confined. The man who firſt complained of the fever this month, was delirious when he complained.

The number of patients added to the ſick liſt this month, were ten ill of the fever, four of the dyſentery, ſix of the rheumatiſm, five of coughs, one of the ear-ach, one of a hernia, three of contuſions, and two of furuncles:—in all 32

The Nonſuch, Raiſonable, and Somerſet were very ſickly.——The Nonſuch left England in March, and fifty of her men have been already carried off by the fever. Each of theſe ſhips has now between 130 and 150 men on their ſick liſt The Somerſet's men have the fever, and the other two ſhips have far more ſcorbutics than

than fevers.——The fever and dyſentery raged much to the Southward this laſt campaign.

JANUARY. 1778.

The wind blew from between NW and SW more than from any other part of the compaſs. On the 8th, 17th, 18th, 21ſt, and 29th, we had generally freſh gales, but on the 7th, 27th, and 30th, calms for a ſhort time; at the beginning of the month, there was ſome froſt, and a good deal between the 14th and 26th; 3d, 8th, 10th, and 18th, light ſhowers; 11th, 17th, light ſhowers with ſnow, 29th and 31ſt, heavy rains, 5th, 20th, 24th, and 25th, ſnow. Full moon 14th, new moon 28th. The mean height of the thermometer was about 39. The atmoſphere was chiefly hazy and cloudy.

The ſick liſt decreaſed until the 8th,—increaſed for two days,—decreaſed until the 22d, and increaſed again until the end of the month. There were never more than twelve in it. The patients who complained were ſix of fevers, one of a head-ach, one of a dyſentery, one of vomiting, five of the rheumatiſm, one of a ſore-throat, one of an ophthalmia, one of a contuſion, one of a fracture, one of a wound, one of an inflammation, one of an abſceſs, and five with furuncles: —26 in all.

On

On the 2d we ſailed to Long-Iſland, and returned the 6th, when we found Lord Howe on board the Eagle:—ſhe was far from being healthy. We ſailed the 7th, returned the 9th, and on the 20th went up and lay between Rhode-Iſland and Prudence; 31ſt anchored at Prudence. —Nothing particular happened among the ſick this month.

FEBRUARY.

A moderate Weſterly wind for the firſt five days was ſucceeded by a ſhort calm; it came to the Eaſtward on the 6th, and blew violently on the morning of the 7th from NNE with ſnow: much damage was done by the gale. It was afterwards variable, but oftener from the NW than from any other quarter. The 12th, 13th, 17th, 20th, and 21ſt were calm. The atmoſphere was ſometimes clear, but generally cloudy or hazy, excepting the 11th and 27th, ſhowers, 16th and 26th, light ditto. It generally freezed from the 6th to the end of the month, and a good deal of ſnow fell. The moon was full the 11th, and changed the 26th. The mean height of the thermometer was 44.

On the 15th we ſailed in company with the Cerberus and Haerlem, and 24 ſail, chiefly of tranſports, all carrying flags of truce; towards evening,

evening, we and the Cerberus parted from the Haerlem and tranſports, and on the 21ſt, PM. we arrived in Cape Cod bay or harbour.

The ſick liſt varied until the 10th,—rather increaſed until the 18th, and was afterwards variable until the end of the month. There were never more than 18 in it:—in all 35 were added to it; viz. eleven who complained of fevers, one of a dyſentery, two of the ſcurvy, one of the rheumatiſm, one of an hæmoptoe, two of ſore throats, two of coughs, one of nephritis, four froſt-bit, one of a ſcald, three of contuſions, one of a wound, one of an inflammation, one of an abſceſs, one of a furuncle, and two of ulcers.

I ſuppoſe it will hardly be doubted but that the badneſs of the weather was the cauſe of the fevers prevailing again.—The ſurgeon of the Eagle informed me, that the yellow fever appeared with violence on board of the fleet laſt ſummer, between New-York and Cheſapeak.

MARCH.

The 1ſt, the wind was SW, 2d, *f* SW *t* WNW, 3d, Northerly with calms, 4th, NW with freſh breezes; until the 21ſt it blew variably and ſeldom ſtrong; 21ſt and 22d, calms at NNW; then it was variable, and rather moderate until the 29th, when a moſt violent gale of wind came on

on at ESE, veered round gradually to the NW blowing ſtrong gales the 30th and 31ſt: the froſt, with ſnow every day except the 6th and 8th, continued 'till the 9th; 10th, 11th, 12th, 13th, 17th, light ſhowers; 16th, 31ſt, ſnow; 21ſt, 22d, and 23d, froſt; 28th, 29th, hail; 30th, ſhowers. We had the atmoſphere more clear than uſual, but it was frequently hazy and cloudy. Full moon the 12th, new moon 28th. The mean height of the thermometer was between 33 and 34.

On the 1ſt, the Haerlem came into Cape Cod Bay, with 21 ſail of tranſports; the lieutenant who commanded her, as alſo his clerk, two midſhipmen, and a number of the people, were ill of the fever. One of her men died, and moſt of them recovered with difficulty. Our ſecond Lieutenant caught the infection by being on board of her on duty. She was cleared, and ſent as a flag of truce to Boſton;—our firſt Lieutenant and my firſt mate went in her. Several men were taken ill, but by following the method uſed in our ſhip, they ſoon recovered.—17th, the Centurion joined us with orders from Lord Howe, and on the 19th the Orpheus joined us from a cruize; they had the ſmall-pox on board, and ſeveral paſſengers for Rhode-Iſland. 25th we ſailed, and arrived the 29th, with the Cerberus and moſt of the tranſports, at New-Port. Captain Griffith commanded.

The

The ſick liſt varied from the beginning until the 29th, when it decreaſed until the end, tho' very little.—Six complained of the fever, one of a dyſentery, two of the rheumatiſm, ſix of an ophthalmia, one of the nephritis, one of the itch, one froſt-bit, two of contuſions, one of an inflammation, and three of furuncles:—in all 24.

The patients fewer than in the preceding month; but our men had neither been fatigued nor got wet, excepting the waterers ſometimes; and they had an opportunity to purchaſe plenty of freſh fiſh and potatoes.

APRIL.

The wind varied frequently until the 10th, and blew a ſtrong gale the 3d; from the 10th 'till the 15th, it was Southerly, light airs and freſh breezes, and then chiefly Weſterly until the 26th; 19th, 21d, Southerly, 23d and 30th, gales, 26th, 27th, Southerly, 28th, variable, and NNE afterwards; 3d, thunder and lightning with ſhowers, 4th, and 20th, ſnow, 5th, 15th, 22d, and 30th, ſhowers, 9th, froſt and ſnow, 16th and 17th, light ſhowers. The atmoſphere was ſeldom clear, but generally cloudy or hazy.—Full moon the 11th, changed the 26th. Mean height of the thermometer about 53.

On the 30th a rebel frigate paſſed and fired at us, without hurting any body.

The Venus was at Rhode-Iſland, and very ſickly. The ſurgeon told me they had loſt about fifty men of the fever, which ſtill continued to rage on board.——I think he ſaid they became ſickly from being crouded with priſoners, and cruizing with them in bad weather. They were ſo ſickly, that they were obliged to come in before their cruize was at an end.—Their full complement was 240 men. In what manner he treated them, I did not aſk himſelf, but I am informed by a ſurgeon, an intimate friend of his, who was on the ſpot, that he followed the antimonial method.

The Haerlem came in; her people are recovering very ſlowly — 9th we ſailed and anchored in the Naragancette paſſage, and relieved the Somerſet, which ſtill continued ſickly. I am told they buried ninety men of the fever ſince they left England, ſeventy of whom were of their beſt ſeamen.

On the 2d I ſent a contuſed patient to ſick quarters. A man who entered from a tranſport at Cape Cod, complained in the afternoon of the 3d of a fever:—he, with two more of her people had been lately ill of a fever. I ſaw ſeveral inſtances of tranſports becoming ſickly from having ſick ſoldiers on board.—Several of our men were ſeized with the fever, by their having been on

on board the Somerſet on the 9th. One in particular told me, that while he was on board of her, one of her people (who came very near him) had a very diſagreeable ſmell.

The ſick liſt varied often, but it rather increaſed until the 14th,—then it altered very little until the 23d, when it began to increaſe for four days, and after that to decreaſe. In all, 25 patients complained; viz. eleven of the fever, one of the dyſentery, one of the ſcurvy, one of a ſore throat, one of worms, four of contuſions, one of a wound, three of inflammations, one of an abſceſs, and one of a furuncle.

When our ſick men had leave to go aſhore, to walk, they were forbid to go near the Somerſet's old hoſpital; they bought milk.—I began on the 9th to dig a garden.

MAY.

Moderate Southerly and variable winds chiefly prevailed, but when it veered round to the Northward, there was a freſh breeze:—the Southerly winds were the ſea breezes. The 1ſt and 2d Northerly, with ſhowers; 4th, 10th, 16th, 17th, 22d, and 31ſt, light ſhowers; 8th, 14th, ſhowers, 11th, 12th, 13th, 18th, 19th, 28th, 29th, 30th, dews; 15th, dews with light ſhowers, 24th,

dews with lightning, 27th, hard ſhowers. The atmoſphere was more frequently hazy or cloudy than clear,—14th and 15th, were foggy. The moon was full the 11th, and changed the 26th. Mean height of the thermometer, about 61.

The Lark had three killed and eight wounded by the rebel frigate on the 30th ult —On the 4th, ſick quarters were broken up at New Port, and all the ſick men were carried to Capt. Brenton's houſe on the Neck, which is converted into an hoſpital.

The ſick liſt varied very little all the month, but rather increaſed towards the end; but fewer were added to it than in any other month. The patients who complained were, eight of fevers, one of a head-ach, two of the rheumatiſm, three of contuſions, and one of a furuncle:—in all 15 only. Our people had leave to walk on Cannanictel, to gather greens; about the 20th they began fiſhing with lines; they alſo bought potatoes.

JUNE.

The 1ſt and 2d the wind was ſoutherly with freſh breezes; 3d, 4th, and 5th, Northerly and NE with light airs and freſh breezes, until the 12th, it was Southerly, *i. e.* from SE to SW: calms 'till the 17th, it was Northerly, generally calm

calm, ſea and land breezes, 17th, 18th, and 19th calms; 20th, 21ſt, Southerly, 22d and 23d, NE, freſh breezes and calms, and then Southerly with frequent calms in the morning until the end. The 1ſt, light ſhowers, 2d, hard ſhowers, 3d, light ſhowers, 4th, ſhowers, 5th, light ſhowers, 7th and 8th, ſhowers, 17th, thunder and lightning with light ſhowers, 21ſt, ſhowers, 26th, light ſhowers, 28th, lightning, 29th, and 30th, thunder and lightning. Dews fell every night when it did not rain, except the two laſt nights. The atmoſphere was generally hazy, ſometimes cloudy, and at others clear; the 3d and 6th were foggy. The moon was full the 9th, and changed the 24th. The mean height of the thermometer was about 70:—towards the end of the month, the weather became very hot, and the ground was burnt up.

The ſick liſt varied but little all the month; indeed it did not vary leſs in any one preceding.—Thoſe who complained were, ſix of fevers, one of a head-ach, one of the dyſentery, one of the ſcurvy, two of the rheumatiſm, one of an hæmoptoe, one of a ſore throat, two of contuſions, two of fractures, one of a wound, two of inflammations, two of abſceſſes, two of furuncles, and two of ulcers:—26 in all. Nothing particular occurred among them.

JULY.

JULY.

Part of the 2d the wind was NW, 7th was calm, the 12th and 13th, the wind was NW. and Northerly, the 17th Eaſterly, from the 20th to the 25th, Northerly and NNE; throughout the reſt of the month it was moſtly Southerly, but ſometimes it was late before the ſea breeze ſet in. The 1ſt, 2d, 3d, 8th, 9th, and 12th, thunder and lightning; 2d, 3d, 4th, 9th, 10th, 11th, 14th, 20th, 22d, 23d, 28th, and 29th, light ſhowers:—the ſqualls always came from the NW. Dews in the night. The atmoſphere was not often clear, but generally hazy or cloudy. The 10th, 27th, and 31ſt, we had fogs. Full moon the 9th,—changed 23d. Mean height of the thermometer was about 74. The weather was frequently very hot.

On the 29th, the French fleet appeared off the harbour's mouth, conſiſting of twelve ſail of the line and three frigates. All our frigates immediately got under way, and went cloſe in to different parts of Rhode-Iſland.—30th, two of the enemy's ſhips went up the Narragancette, and two up the Seconnette. PM. the King's Fiſher, Alarm, and Spitfire galleys were burnt in the Seconnette, to prevent their falling into the enemy's hands. As ſoon as we got into Codding-

ton-

ton-Cove laſt night, the people were employed about getting the guns aſhore, with ammunition, proviſions, and ſtores.—31ſt, our people were employed as before. Tents were erected aſhore.

The ſick liſt rather increaſed 'till the 12th, and after that varied and decreaſed. The patients who complained were ſix of fevers, two of the head-ach, one of the dyſentery, one of the rheumatiſm, one of a cough, one of an epilepſy, one of a ſcald, two of contuſions, five of wounds, four of abſceſſes, five of furuncles, five ſtung by inſects, and one of an ulcer:—35 in all. One of the head-ach patients, who is ill of the fever, was a priſoner while he was ſeized with that diſorder.

None but a guard ſlept on board after the 29th.—It is ſomewhat remarkable, that during ſuch uncommon duty as was performed by our people the three laſt days of the month, and with ſo much unavoidable hurry as attended it, that no accidents happened among them. Several of them were bit in the tents by inſects.—Nothing particular occurred among the patients. On the laſt day of the month we had only lame people in the ſick liſt.

The Journal ends here very properly for various reaſons. However, I cannot help making mention of a marine, who complained the firſt of Auguſt:—after having been very drunk, (probably with bad ſpirits) and lying in the ſun the preceding day, he was ſeized in the night with different ſymptoms, and in the forenoon his head ached, he was griped, very thirſty, and complained of weakneſs. I gave him an emetic, and ordered him an ounce of ſalts; but as they gave him no ſtool, and he complained much of his bowels and limbs paining him, towards evening I gave him a clyſter, which procured two ſtools, with a great diſcharge of wind, and gave him much eaſe:—however, he died in the night. I know not what was the cauſe of his death, whether it was owing to the liquor he drank, or to a coup-de-ſoleil, or ſome miſmanagement.—He expired in a ſhorter time than the man who died on the 12th of January, 1777 at New-York, whom I ſuſpected of having drank ſome bad new ſpirit.

Although

Although the infection received a very evident check on the 18th of March, by our firing ſo much, and ſeemed to be wholly ſubdued in the month of November following; yet we find it ſtill continued on board, tho' dormant, and only required ſome particular circumſtance to excite it, which happened in the beginning of December, it being then again rouſed into action, by a ſeries of bad weather; or perhaps infected cloaths had been ſtole from ſome of the men who died, and concealed until thoſe in whoſe poſſeſſion they were, uſed them inſtead of their own, now rendered uncomfortably wet. From my knowledge of ſeamen and marines, I think this is more than probable, although I cannot demonſtrate it as a fact.

CHAP. IV.

Contains FOUR TABLES, which ſhow the different diſeaſes, and the number of each diſeaſe, that occurred on board of his Majeſty's ſhip JUNO, from April 4, 1776, until July 30, 1778.

The loweſt column but one of tne three firſt Tables, ſhews the whole number of patients of every menth; and the loweſt the number who died every month. The right-hand column ſhows the whole number of patients of every diſeaſe during the period of time which that table repreſents.

TABLE

TABLE I.

From APRIL 4, *to* DECEMBER 31, 1776.

DISEASES.	April.	May.	June.	July.	August.	Sept.	October.	Novemb.	Decemb.	Number of Diieaſes.
Fever	30	40	16	7	3	5	40	25	50	216
Pleuriſy			1							1
Quinſey		1								1
Plethora		1								1
Head-ach					1	2				3
Dyſentery		1	5	1	9	16	2		1	35
Belly-ach		3		1	2	1			1	8
Rheumatiſm	1	1	1	2	1		1	2	9	18
Scurvy	2		2	3	1			1		9
Gout	1		2							3
Scrophula									1	1
Singultus		1								1
Hectic	2				1					3
Hemorrhage			1							1
Cough	1		2	4	3			3	1	14
Sore Throat				1	2					3
Ear-ach								1		1
Deafneſs		1			1					2
Giddineſs					1					1
Epilepſy			1	1						2
Ophthalmia						1				1

TABLE I. CONTINUED.

Diseases.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	No. of Diseaſ.
Nephritis		1								1
Hemorrhoides	1	1				1	2	1		6
Eruption	1	2			1	1	1			6
Itch	4	1	1				1			7
Scald Head						1				1
Froſt-bit									1	1
Scald	1									1
Strain	2			1	1	3	1	3	2	13
Rupture			1						2	3
Contuſion	3	7	8	5	1	2	3	6	6	41
Fracture	1			1					2	4
Wound		1		1	3	3		2	2	12
Inflammation	3	2		1	1			2	2	11
White Swelling	1	1				1				3
Furuncle					1	1				2
Excoriation	1		1							2
Abſceſs	2	8		2	1				3	16
Ulcer	5			1				2		8
No. of Patients	62	7[illegible]	42	32	34	38	51	48	83	463
No. of Deaths		1	1				1		1	4

TABLE II.

From JAN. 1, *until* DECEMBER 31, 1777.

DISEASES.	Jan.	Feb.	March	April.	May.	June.	July.	Auguſt	Sept.	Octob.	Nov.	Dec.	No. of Diſ.
Fever	44	62	34	27	19	13	7	9	5	9	4	8	241
Pleuriſy								1					1
Plethora				1									1
Head-ach	1	1		1			1				1		5
Dyſentery	1						1	5	15	14	2	4	42
Belly-ache		2			1		2						5
Chol. Morbus										1			1
Vomiting								1					1
Indigeſtion	1		2			1	3	1					8
Rheumatiſm	5	5	3		2	1	2	1		2	1	6	28
Scurvy	7	9	6	3		3	6	3					37
Palpitation of the Heart											1		1
Hypochondria								1					1
Vomica								1					1
Hemorrhage						1							1
Cough	9	5	3	1			1	1			1	5	26
Sore Throat	2	3		2	1				1	1			10
Ear-ach			2									1	3
Giddineſs			1										1
Epilepſy						1							1
Nephritis	3	1											4
Diabetes			1										1

TABLE II. CONTINUED.

Diseases.	Jan.	Feb.	March.	April.	May.	June.	July.	August	Sept.	Octob.	Nov.	Dec.	No. of Diseaſ.
Worms							1						1
Eruption							1	1					2
Froſt-bit	1	1	4								2		6
Scald	1	3											4
Strain		1			1	1	2	1					6
Rupture		2										1	3
Hydrocele							1						1
Contuſion	6	6	3			2	1	2	5	3	6	3	37
Wound			1	2		4			2		2		11
Inflammation	1	1	2	6	1		3	2		1	3		20
Furuncle	1	1	1		1			1	2		1	2	10
Encyſted Tumour							1						1
Excoriation	1	2	1										4
Abſceſs	1				1	1		1		1			5
Ulcer		2	3		1	1	1	1					9
Accidents									4				4
Number of Patients	85	107	67	43	28	29	34	33	34	32	24	30	546
Number of Deaths	1	1	3	1					5	1			12

TABLE

TABLE III.

From JAN. 1, *until* JULY 30, 1778.

DISEASES.	January.	February.	March.	April.	May.	June.	July.	No. of Diſeaſes.
Fever	7	11	6	12	7	6	6	55
Head-ach	1				1	1	2	5
Dyſentery	1	1	1	1		1	1	6
Vomiting	1							1
Rheumatiſm	5	1	2		2	2	1	13
Scurvy		2		1		1		4
Hemoptyſis		1				1		2
Cough		2					1	3
Sore Throat	1	2		1		1		5
Epilepſy							1	1
Ophthalmia	1		6					7
Nephritis		1	1					2
Worms				1				1
Itch			1					1
Froſt-bit		4	1					5
Scald		1					1	2
Contuſion	1	3	2	4	3	2	2	17

TABLE III. CONTINUED.

Diseases.	Jan.	Feb.	March.	April.	May.	June.	July.	No. of Diseaſ.
Fracture	1					2		3
Wound	1	1		1		1	5	9
Inflammation	1	1	1	3		2		8
Furuncle	5	1	3	1	1	2	5	18
Abſceſs	1	1		1		2	4	9
Stung by Inſects							5	5
Ulcer		2				2	1	5
Number of Patients	27	35	24	26	14	26	35	187
Number of Deaths								

TABLE

TABLE IV.

Shews the whole Number of the preceding Tables collectively—diſtinguiſhing the Number of thoſe who died on Board—the Number ſent to the Hoſpital—and the Number of thoſe who died of Fevers at the Hoſpital.

Diseases.	Number.	Deaths on Board.	Number ſent to Hoſpitals.
Fever	512	7	69*
Pleuriſy	2		
Quinſy	1		
Plethora	2		
Head-ach	13		
Dyſentery	83	2	11
Belly-ach	13		
Cholera Morbus	1		
Vomiting	2		
Indigeſtion	8		
Rheumatiſm	59		6
Scurvy	50		18
Gout	3		1
Scrophula	1		
Palpitation of the heart	1		
Hypochondria	1		
Singultus	1	1	
Hectic	3		1 †
Vomica	1		1
Hemoplyſis	2		1
Hemorrhagia	2		
Cough	43		9 §
Sore Throat	18		

* Three of theſe were ſent for ſmall-pox. † Sent as phthiſic.
§ Three of theſe were ſent as weak.

TABLE IV. CONTINUED.

Diseases.	Number.	Deaths on Board.	Number sent to Hospitals.
Ear-ach	4		
Deafneſs	2		
Giddineſs	2		
Epilepſy	4		2*
Ophthalmia	8		
Nephritis	7		
Diabetes	1		1
Worms	2		
Hemorrhoides	6		
Eruptions	8		2
Itch	8		
Scald Head	1		1
Froſt-bit	12		
Scald	9		
Strain	19		
Rupture	6		1
Hydrocele	1		1
Contuſions	95		2
Fracture	7	1	
Wound	32	1	
Inflammation	39		1
White Swelling	3		
Furuncle	30		
Encyſted Tumour	1		
Excoriation	6		
Stung by Inſects	5		
Abſceſs	30		
Ulcer	22		5
Accidents	4	4	
Whole Number of Diſeaſes	1196	16	133†

* One of thoſe was ſent as inſane.

† Many were convaleſcents, and ſome were priſoners.

OBSERVATIONS, &c.

PART II.

CHAP I.

INTRODUCTION.

IN the following deſcription, the fever is diurnally deſcribed, and the ſymptoms are arranged as they daily appeared; but it is not to be underſtood, becauſe ſome of them are repeated for many days ſucceſſively, that they have been confined all along to thoſe in whom they firſt appeared:—on the contrary, they are to be conſidered as now making their firſt appearance in other caſes. It is alſo to be remembered, that ſome were ſeized with more, and others with fewer ſymptoms, and that they were combined very

very differently with reſpect to the order in which, for method's ſake, they are here arranged. To avoid repetitions, theſe are only, in general, every day mentioned which were moſt urgent; but when the fever is on its decline, about the 31ſt day, and few are then ill, the worſt ſymptoms are daily repeated.

Though the ſymptoms which we have termed diagnoſtic, generally introduce the fever, it was, at its firſt appearance, attended with many others. 'Tis highly neceſſary, I think, that young practitioners ſhould not only be appriſed of this, but that they ſhould be made acquainted with all the various appearances which the fever puts on, from its commencement to its termination, in a number of patients living as nearly as poſſible in the ſame manner;—and this is the reaſon I have taken the trouble to deſcribe it ſo minutely. The more we conſider ſuch variety of ſymptoms occurring in the ſame diſeaſe, among perſons living under the ſame regimen, the more we muſt be convinced that they are regulated more by the conſtitution of the patient, than by all other circumſtances attending them.

SECT. I.

The SHIP FEVER *deſcribed, diurnally.*

THE diagnoſtic ſymptoms, or thoſe which generally introduce the fever, are rigours or chillneſs, or alternate chills and heats; ſickneſs at ſtomach, head-ach, univerſal pains, (or, as the ſick expreſs it, pains all over them) or pains in all their bones, but eſpecially in the loins or back, and a morbid appearance in the countenance.

But ſome informed me, that before the ſhivering and other ſymptoms were perceived, they had been ailing, and not well, as they ſaid, for ſeveral days,—a week or a fortnight,—three weeks—and even a month:—ſo long did ſome droop. The duration and violence of the rigours, chillneſs, or alternate chills and heats which introduced the fever, varied greatly; and theſe again were either ſucceeded by the following ſymptoms, or accompanied with many of them; and they were very irregular in different perſons, both as to their violence and duration.

General debility, univerſal ſoreneſs, or, in their own words, weakneſs in all their limbs, and ſore-

foreneſs all over; great depreſſion, apprehenſion, deſpondency, laſſitude, faintneſs, extreme coldneſs, ſyncope, and epilepſy; a bitter taſte in the mouth, oppreſſion about the præcordia, nauſea, reaching, porraceous or bilious vomiting, a ſlight cholera morbus, belly-ach, dyſenteric ſymptoms, diarrhæa with ſuppreſſion of urine, or the oppoſite extreme of coſtiveneſs; the head either much confuſed, or diſturbed with pain in the temples, in the hind part, or in the forehead; giddineſs, or deafneſs; hæmorrhage at the noſe, tooth-ach, ſore throat, and relaxed uvula; ſenſation of ſwelling about the præcordia, and of the abdomen after chilneſs; pains at the præcordia previous to vomiting, uneaſineſs in the thorax, very acute pains of either ſide,* reſembling a pleuriſy, an urgent cough, and difficult reſpiration; a pain of the ſide, ſhooting down into the groin or thigh, pain in both ilia, that deſcended to the feet, a pain reaching from the crown of the head to the ſole of the foot of one ſide; pain of the right ſhoulder, pain of the hams. Some, at the very beginning, had great heat, and much perſpiration, without any previous

* Violent local pains ſuſpend the patient's attention to, or his ſenſation of ſlighter ſymptoms—of which they again complain as ſoon as the violent pain is relieved.

vious ſhivering† or coldneſs; and in ſome furuncles appeared‖.

Various degrees of heat and thirſt ſucceeded the rigors and chilneſs in different perſons. In ſome, the heat was burning, and the thirſt inſatiable; and in others both were moderate, tho' greater than in health. The pulſe varied no leſs, and as all thoſe variations were perceptible throughout the fever, they will be ſeldom repeated.

Such were the ſymptoms which at firſt uſhered in the fever.

Firſt Day.—Of thoſe who were ſeized in the forenoon or afternoon, and complained immediately, numbers had remiſſions, and were much relieved within the firſt twenty-four hours by a vomit, which was inſtantly given; and by a free perſpiration procured in the night, by ſudorifics and diluting drinks; and ſome even recovered by theſe means—but few had remiſſions without ſuch aſſiſtance.

2.—Many paſſed a reſtleſs night from having no remiſſion; ſome had a remiſſion, which, as well

† Perhaps it was owing to their ſlightneſs that the patients did not attend to them, though they did precede the heat.

‖ I ſuſpect thoſe made their appearance before the patient was ſeized with fever.

well as the exacerbations and paroxyſms throughout the courſe of the diſeaſe, were very irregular with reſpect to the period at which they appeared, and their duration. Many had remiſſions of particular ſymptoms, while the reſt continued as violent as ever; and theſe remiſſions, whether more or leſs diſtinct, were generally effected by perſpiration, and in ſome caſes by ſtools,* very ſeldom by vomiting.‡ But profuſe evacuations, either by ſweat or ſtool, were ſo far from always procuring remiſſions, that they generally ſeemed to increaſe the ſymptoms. Some were yet chilly —others had alternate chills and heats, and ſome a ſenſation of cold in the back only. The moſt general and the moſt urgent ſymptoms were head-ach, lumbago, and univerſal pain. The head was now affected in a more violent degree; a heavineſs, lightneſs and giddineſs from looking at any object, were complained of, together with a burning heat and profuſe ſweats in the forehead; pain of the left eye, or of both eyes, tho' neither were inflamed, pain over the eyes, eſpecially in ſtooping down; ſhooting pains in the eyes, and an unuſual motion in them; inflammation of the eyes, with an eruption in the face, which in others was turgid, and the eyes watery.

The

* The natural or ſpontaneous evacuations are here meant.

‡ This patient came from the hoſpital the day before, and relapſed.

The head appeared ſwelled, pain in both ears, and a diſcharge from the left with pain; deafneſs, pain of the one ſide of the neck and ſhoulder,—ſore throat, hoarſeneſs, and difficulty of ſwallowing were greatly increaſed by either a teazing or a violent cough; as in like manner were the giddideſs, and the pain in the thorax, the abdomen, and the extremities; the right ſide was moſt frequently affected. The ſtomach and bowels were as much diſturbed with pain, nauſea, reaching, vomiting, coſtiveneſs, or purging, as ever. Cramps and ſpaſms of the limbs, and pains of the heels were complained of.—There was now univerſal uneaſineſs, beſides ſoreneſs; proſtration of ſtrength and ſpirits, and faintneſs, while ſome thought themſelves neither well nor ill. A number were troubled with great anxiety, much uneaſineſs and pain at the heart, (as they expreſſed it, pointing to the præcordia); bitter taſte of the mouth, porraceous vomiting and purging, hæmorrhage from the left noſtril, expectoration of fetid pus, hæmoptoe, delirium, and petechiæ, were frequent.

The countenance appeared as if the patient had drank, *i. e.* greatly flushed, and the eyes inflamed; or it was pale or ſallow, and greatly diſeaſed:—it was very wild, while the patient thought himſelf well. There were furuncles on the neck, and an angry eruption on the pained ſide of the thorax; the tongue was chopt acroſs,

foul, or blackiſh; the pulſe was preternaturally full and ſoft; there was a yellowiſh jelly-like diſcharge from bliſtered parts.

In the afternoon there were many ſlight and ſhort remiſſions, but more exacerbations; and the former were followed by violent paroxyſms, preceded in ſeveral caſes with, and in others without ſhivering. Relapſes happened from irregularity; there were interrupted profuſe ſweats, and the perſpiration, thirſt, heat, and pulſe, varied much.

3.—A few were ſent to the hoſpital,—ſome recovered, others were now arrived at a ſtate of recovery, and there were many remiſſions. But numbers, inſtead of being relieved, were greatly debilitated and depreſſed by profuſe ſweats in the night. Perſpiration kept up twenty-four hours procured no remiſſion to ſome; in others a profuſe moiſture was diffuſed all over, and on feeling the pulſe, a diſagreeable ſenſation was impreſſed on the fingers; and this, though not ſo ſtrong, was perceptible in all, eſpecially during perſpiration, or cold, clammy, and uncomfortable ſweats. Many paſſed the night very ill, either from there being no remiſſion of the ſymptoms, or from exacerbations, or irregular paroxyſms, or from perſpiration and inquietude.—The rigours held ſome four hours, and were followed by violent paroxyſms. A ſenſation of great cold, while the ſkin was burning hot, and a ſen-

a ſenſation of chillneſs at times, were troubleſome. But the moſt diſtreſſing ſymptoms during the paroxyſms, (beſides all the complaints already mentioned, which were now aggravated by more or leſs cough, rendering reſpiration difficult) were ſtrictures about the thorax, pain of the crown of the head, pain in the ſcrobiculus cordis ſhooting through to the back, or darting from the right to the left breaſt; ſhooting, wandering, or flying pains, pains acroſs the oſſa innominata, of the right buttock, knees, and wriſts; a loſs of ſpeech in the night, a diſtorted face, great inquietude, delirium, and death in one caſe. Both the thorax and abdomen were diſtreſſed as before; a bloody diſcharge from the left ear, the hæmorrhage from the noſe, hæmoptoe, various expectorations of viſcid, ropy ſtuff, occurred in ſome caſes, and in others very fetid pus was diſcharged. The ſtools were ſtill porraceous, and bilious, or watery, or white with high-coloured urine. There was a copious diſcharge of urine, and ſometimes involuntarily.—Some had large eruptions on different parts of the body; raving, and petechiæ.

Great debility, giddineſs, heavineſs, and lightneſs of the head, with great deſpondency and faintneſs, and a bitter taſte in the mouth, were very diſtreſſing during the indiſtinct remiſſion. The limbs were as tired and ſore, (to uſe their

phraſe) as if they had come off a long journey; and ſome felt that peculiar ſenſation of the back and limbs, commonly expreſſed by being aſleep; an inability to ſhut the hands, was complained of; internal ſoreneſs, or in their words, ſoreneſs in the inſide. The countenance was ſtill fluſhed, or ſometimes pale, ſallow, wild, and greatly dejected; the palate ſore, and the tongue not only ſo, but red and foul in the middle.

4.—A few recovered; others were now become convaleſcents, a few had remiſſions all day, and ſome cold ſweats. Profuſe perſpiration in many, as heretofore, procured no remiſſion; remiſſions, exacerbations, and paroxyſms, were as irregular as ever, and the two latter were more generally violent. The paroxyſms ſevere with raving, followed ſweating at midnight, and exacerbations in the morning. And there was alſo remiſſion of pain while the uneaſineſs, heat, and thirſt continued. Remiſſion of the headach by ſtools. The moſt urgent ſymptoms were frequent ſhivering, alternate heats and chills, vomiting; the paroxyſms being ſtill introduced by ſhivering, and exacerbations by languor, and heat in the head. The eyes were prominent in violent paroxyſms, which were ſometimes preceded by cough, with pain in the breaſt; the cough in many caſes was dry and urgent, and increaſed the belly-ach.

The

The pain was moſt vehement in parts which had been formerly hurt, particularly about the clavicles, and palpitation at the heart* occurred. The head, eyes, ears, countenance, throat, thorax, and abdomen were ſtill affected as at firſt; and in ſome caſes without any remiſſion; the cough was ſometimes attended with difficult reſpiration and tremours. The pains were as various and numerous as before, accompanied with tinnitus aurium. The various diſcharges and evacuations, with expectoration of brown thick ſtuff, continued, and the diarrhœa with faintneſs—worms were voided by ſtool. Some had cold ſweats in the night, an interrupted reſpiration, and a ſenſation of creeping and waſting of the fleſh. The hæmorrhage from the noſe increaſed the giddineſs; an abſceſs which began to form on the neck, before the fever commenced, ſuppurated kindly, and after being laid open diſcharged good matter freely. The urine ſmelled very ſtrong, and the patients were not refreſhed nor relieved by ſleep. A green matter was diſcharged from bliſtered parts, raving was common, and many had petechiæ. To the ſame ſymptoms which prevailed during the remiſſions on the preceding days, were added terror, momentary partial ſweats, depreſſion, breathing

* The patient was ſubject at other times to this ſymptom.

ing through the noſe, loſs of taſte, univerſal debility and ſoreneſs; and the head-ach and cough were increaſed by getting out of bed, and ſitting up.

There was no alteration for the better in the countenance, and the tongue in ſome was very foul and much enlarged.

5.—Some recovered, numbers began to recover, others had remiſſions, and many had none. Violent exacerbations and paroxyſms were more frequent. Remiſſions were ſtill introduced by perſpiration or ſtools; many paſſed the night ill from rigours, head-ach, various pains, urgent cough, ſweating, inquietude and wandering; ſhivering for two hours, or chilneſs, or alternate heats and chills introduced the paroxyſms, which were attended with all the variety and ſeverity of pain, cough, and laborious reſpiration hitherto mentioned, and likewiſe with reaching, belly-ache, conſtipations in ſome, and in others diarhœa; beſides inflammation of the throat, and pain of the neck, there was pain of the right ſide of the head, eyes and neck, which ſhot through to the left temple, on turning the head round; violent pains of the left ear and ſide of the head, dimneſs of ſight at times, nervous pains, to which the patient was ſubject, and tremors. Some were chilly at times, others were ſo all day. Diſagreeable reſpiration, loſs of ſpeech, muttering and ſinging inarticulately, a ghaſtly countenance, and death in one caſe.—

Some

Some lay contracted on one ſide:—the evacuations were little altered; either colliquative ſweats, a reeking moiſture, or partial profuſe ſweats continued;—blood and pus, or pus alone were ſpit up; the hæmorrhage at the noſe, bilious vomitings, porraceous and watery ſtools continued; and ſome voided ſtools mixed with blood and matter; the angry eruptions about the mouth extended up to the noſe; an itch-like eruption ſpread over the body; petechiæ were very numerous; the expectoration of blood and pus, and of pure pus, continued likewiſe, and the gelatinous diſcharge from bliſters.

All the diſtreſſing ſymptoms before taken notice of during the imperfect remiſſions ſtill prevailed, together with anxiety and reſtleſsneſs.

The countenance and tongue had as various appearances as formerly, and the teeth began to be covered with ſordes.

6.—A reſtleſs, unquiet night; there was continual chilneſs, vomiting, and purging, in ſome caſes, and in others ſneezing preceded the paroxyſms, which were, in ſome caſes brought on by being wet; and were ſtill accompanied with pains and other complaints of the head, eyes, ears, throat, abdomen, loins, and extremities; a very urgent cough, which occaſioned ſickneſs at the ſtomach; the head and abdomen were more diſturbed than ever, but many thought themſelves better at times. Some complained of the belly-ach, accompanied with ſwelling and tenſion

ſion of the abdomen, pain all down the ſpine, pain of the ancles after profuſe ſweating, a ſenſation of hollowneſs in the breaſt, and a ſighing kind of reſpiration; tremors, ſpaſms, delirium, petechiæ, and a perfect mania.

The evacuations by the ſkin, vomiting, ſtool, and expectoration, and the eruptions, with the appearances of the countenance, and of the tongue, were as various as ever; beſides, the countenance was now ſooty in ſome caſes, and the lips were very foul; the tongue was rough, ſlimy, and black on each ſide. In a caſe with vomica, the breath was very offenſive, and there was great thirſt even when the ſkin was quite cool.

The ſame diſagreeable ſymptoms prevailed during the remiſſion as before. Some were arriving at a ſtate of recovery, ſome advancing in it, and a few recovered.

7.—A bad night from heat, thirſt, ſweating, head-ach, all the variety of pains, dyſpnœa, and cough, hitherto mentioned. In ſome caſes there were the very ſame ſymptoms as at the beginning:—the head, eyes, throat, ſtomach, and inteſtines, were ſtill much diſordered; heat about the head, pain down the whole ſpine, pain about the os pubis; the part of the ſide in which there was excruciating pain, was ſwelled and tenſe. Shivering ſtill was frequent; a worm was voided by the noſe; relapſes with head-ach, the alæ of the noſe were diſtended; ſome drank often

often and greedily, looked frequently at their fingers, were agitated with ſtarting and tremors, continual wandering, raving, effuſion of tears, involuntary diſcharge of the fæces, and mania, and theſe ſymptoms terminated in death. Expectoration had the ſame appearances as uſual, and was not general. There were numerous eruptions of various kinds; ſome like the ſtinging of nettles, but the itch-like eruptions were the moſt general, and the moſt troubleſome; petechiæ were obſerved—the tongue had various appearances, and trembled on putting it out, and the countenance was much diſeaſed.

The remiſſions were attended with the ſame train of ſymptoms as uſual—ſome recovered, and numbers were recovering.

8.—The ſick reſted ill from ſhivering, headach, whimſical dreams, raving, ſtarting, working with the hands, oppreſſion and foreneſs at the præcordia, and a ſhort, laborious reſpiration, while the patient thought himſelf well. Rigors of four hours continuance introduced paroxyſms, during which moſt of the violent ſymptoms already mentioned ſtill haraſſed the patients. In ſome caſes, there was no remiſſion for twenty-four hours. Neither the head, thorax, nor abdomen were relieved. Univerſal pain, uneaſineſs, anxiety, and inquietude were frequent.—One became ſcorbutic. The bliſtered parts, the noſe and tongue, were very ſore. The face was

ſqualid, the noſe contracted, continual raving was not uncommon, and ſome were even manaical; ſome lay on their backs with a ghaſtly countenance; the reſpiration was very laborious, with a rattling in the throat; petechiæ were ſtill obſerved, coſtiveneſs was very obſtinate, white frothy ſtools with much flatus, were voided by the aſſiſtance of clyſters. In ſome caſes the expectoration was free and laudable—in many the reverſe was obſerved. Previous to the cough which brought on the hæmoptoe, there was a ſenſe of great weight about the præcordia; and after the hæmoptoe a ſenſation of great heat remained in the ſame parts. Hæmorrhoides and a prolapſus ani were troubleſome to a few patients.

The countenances, eruptions, tongue, thirſt, the ſtate of the ſkin and pulſe varied as uſual, as alſo did the remiſſions, and the number of thoſe who recovered.

9.—The patients were very reſtleſs in the night, and troubled with ſcalding of the urine; their ſleep was not refreſhing; ſhivering, or alternate chills and heats, very frequently introduced the paroxyſms; but in ſome caſes they were preceded by a ſtiffneſs of the neck, or an obtuſe pain of the head, with ſickneſs at, and pain of the ſtomach, and bilious vomiting, were more violent than ever. The head was very much diſturbed with deafneſs, giddineſs,

and

and pain, as were the thorax, abdomen, loins, and extremities; univerſal pains about the joints, urgent cough, coſtiveneſs, and diarrhæa were ſtill frequent; prolapſus ani, and much heat about the anus. Some had a dyſentery, and great debility, eſpecially of the loins; the voice became rough, the eyes were very much affected, and even always cloſed, unleſs the patient was rouſed. A few were turbulent and unruly, and in ſome were obſerved loſs of ſpeech; pulſe hardly perceptible, and a turning up and rolling of the eyes—two died. Some complained of numbneſs, or want of feeling; hectic heats were diſtreſſing, very offenſive pus mixed with blood, was expectorated, as was alſo, in ſome inſtances, an exceeding viſcid brown ſtuff.—The eruption about the mouth and noſe ſuppurated, and began to dry; and the itch-like eruption ſcaled off. The countenance continued to be very much diſeaſed, as well as the tongue, which in ſome caſes was very black, much enlarged, ſtiff, and very painful; in others it ſwelled much, and was chopt, and the teeth were covered with ſordes. Many petechiæ were ſtill obſerved.

Some now recovered, and many were recovering.

10. Inquietude, univerſal uneaſineſs, delirium, and ſhivering were ſtill frequent. The heat, thorax,

thorax, abdomen, loins, extremities, and particularly the joints were ſtill much and variouſly afflicted, and the pains in thoſe parts exaſperated in the ſame manner as ever by the cough.—Great hoarſeneſs, and a difficulty and pain in ſpeaking, aroſe from an enlarged black tongue, and a parched ſore mouth and throat: ſome lay on their back, with the mouth open. Tremors and ſtartings were diſtreſſing, and petechiæ of different ſhapes and ſizes, with other eruptions of various kinds, were ſtill obſervable; in one, they ſpread at the baſe and became livid. The ſallow and much diſeaſed countenance ſtill continued; the tongue and teeth were very foul and black, expectoration was more general; the worſt ſpecies of which was very yellow and very fetid.

Beſides the train of ſymptoms already mentioned, which accompanied the remiſſions, there was a ſenſation as if cold water had been poured on the loins, or down the anterior parts of the thighs. The convaleſcents gathered ſtrength very ſlowly; but ſome recovered.

11. Many paſſed the night very ill, from violent paroxyſms and exacerbations, during which the body was afflicted as uſual:—rheumatic pains were very common; delirium, a pulſe hardly perceptible, and ſome died. Relapſes introduced by chilline ſs were frequent, and colliquative ſweats with ſickneſs at ſtomach and reaching

reaching, very diſtreſſing. The blood was in a diſſolved ſtate; but a few drops of blood from the right noſtril, greatly relieved the head. Involuntary effuſion of tears, and expectoration continued. Coſtiveneſs was very troubleſome. There was little alteration on the countenance, throat, tongue, and teeth; only the pellicle began to caſt off from the tongue. The eruptions continued. Some convaleſcents were coſtive—others had a diarrhæa. Moſt of them complained of uneaſineſs, heavineſs of the head, giddineſs, deafneſs, languor, and debility.——Some recovered.

12. Inquietude, cough, and the uſual pains diſtreſſed many in the night; as did alſo alternate chilneſs, profuſe ſweats, and large expectoration, which very much debilitated the ſick. Chillineſs, or alternate chills and heats, ſtill introduced paroxyſms with vomiting and delirium. Exacerbations were very violent, and relapſes frequent. Pains in every part, as well as the uſual complaints about the head and throat, bitter taſte in the mouth, ſickneſs in the ſtomach, or an uneaſy ſenſation, reaching, diarhœa, coſtiveneſs, ſuppreſſion of urine, and deſpondency were frequent. Some were yet troubled with partial and momentary ſweats. The various eruptions, appearances of the countenance, tongue, teeth, throat, and expectoration were not altered for the better. Hard lumps

were

were voided by the aid of clyſters; and in ſome white ſpecks were obſerved on the bliſtered parts: petechiæ ſtill appeared.

Thoſe who had ſhort and uncertain remiſſions ſtill complained of thoſe ſymptoms already mentioned; as did the convaleſcents; and of them it is remarkable, that they often denied their having had any ſleep, though they ſlept well.—Some recovered.

13. Chillineſs at times; relapſes, with nauſea, and bitter taſte in the mouth; paroxyſms, and exacerbations of all the various pains, and concomitant ſymptoms already mentioned, were yet frequent, with what the patients called aching of their bones. Coſtiveneſs, diarhœa, univerſal debility, eſpecially of the joints, and ſoreneſs, giddineſs, pain of the right ear, and depreſſion, were prevalent. Some were become extremely thin; and numbers were harraſſed with the itching eruption. Petechiæ and remiſſions were accompanied with the uſual ſymptoms. When the pellicle caſt off from the tongue, it was red and very ſore.

Many of the convaleſcents were feeble and peeviſh. Great difference was always perceptible in the pulſe, thirſt, and ſtate of the ſkin.—Some recovered.

14. Many of the patients had reſtleſs nights from head-ach paroxyſms; and ſevere exacerbations of the various pains and cough: but the rheu-

rheumatic pains, hoarſeneſs, ſore throat, and cough were moſt frequent and violent in the cold winter months.* Relapſes, chillneſs, bitter taſte in the mouth, ſickneſs at ſtomach, giddineſs, heavineſs, great debility, languor and depreſſion were diſtreſſing. There was a diſcharge from, and alſo a pain in the right ear; a free expectoration in ſome caſes only; whenever the pellicle caſt off from the tongue, another began to form immediately; coſtiveneſs, and diarrhœa continued; there were ſtill petechiæ and other eruptions, and a more florid appearance, without that itching formerly mentioned. The convaleſcents complained of chillneſs. Some were ſtill inſenſible and delirious, and ſome recovered.

15.—Many paſſed an indifferent night from languor and head-ach. Numbers were not relieved, but very faint after perſpiration in the night; relapſe with ſhivering, chillneſs, ſickneſs at ſtomach, violent paroxyſms or exacerbations, with delirium, and in the afternoon three drops of blood from the noſe; tremors of the hand, petechiæ, pains in the toes, but eſpecially the left; univerſal ſoreneſs and debility, ſore throat and depreſſion. The eyes were inflamed in ſome caſes, and in others ſore and painful; the diſcharge from the ear was leſs, but ſtill troubleſome; coſtiveneſs and piles were obſerved.

The

* The fever continued two years in the ſhip.

The tongue was foul in the morning after ſleep, and thoſe who had remiſſions, as well as the convaleſcents, were fatigued with the uſual ſymptoms. Some recovered.

16.—There was debility and faintneſs after profuſe ſweats, and ſenſation of coldneſs while the ſkin was very hot. Irregular paroxyſms and exacerbations; alternate chills and heats, relapſes, nauſea, head-ach, giddineſs, univerſal pains, eſpecially about the præcordia, with inceſſant cough, and about the loins, knees, and ancles: great anxiety, and ghaſtly countenance, were frequent ſymptoms; ſome ſpoke very indiſtinctly, groaned, and the tongue was black, yet they thought themſelves better. Petechiæ, diarhœa, coſtiveneſs, ear-ach, and the itching eruption remained; the tongue was much diſeaſed, and the teeth were foul.

The ſick recovered very ſlowly, but ſome entirely.

17.—Some paſſed the night ill from urgent cough, exciting the various pains, and from heat and inquietude; deſpondency and groundleſs apprehenſions diſturbed others; the remiſſion of the cough, pain of the toes, relapſes, chillneſs, or ſlight rigours, were ſucceeded by head-ach, ear-ach, pain about the breaſts, and uneaſineſs of the ſtomach; giddineſs, debility, depreſſion, tremors of the hand, numbneſs of the lower

lower extremities; coſtiveneſs, a laudable expectoration. Thick urine was voided with pain; in ſome caſes the diſagreeable ſenſation was ſtill impreſſed on the fingers in feeling the pulſe; eruptions continued, there was an angry furuncle on the right cheek, and the tongue was ſtreaked black. The countenance, thirſt, pulſe and ſtate of the ſkin, differed greatly amongſt the patients.

18.—The ſick paſſed a reſtleſs night from reaching, belly-ache, partial ſweats, and various pains already mentioned; the ſides, knees, and toes were moſtly complained of; and a dry, teazing cough. Relapſes with diarrhœa, head-ach, and various pains. Coſtiveneſs continued, and a diarrhœa commenced. The ear-ach, and a watery diſcharge from the ear, was troubleſome. Some had a diſagreeable reeking clammy perſpiration. A black bliſter on the tongue, when the patient awoke in the morning, was a common ſymptom of diſeaſe. The ſick were generally feeble and dejected, ſome of them groaning at times. The eruption began to dry and wear off; the tongue, as well as the countenance, was yet diſeaſed; the latter ſallow and dejected, and the former of the colour of a pomegranate.

19.—Shivering or chillneſs, relapſes, ſickneſs at ſtomach, head-ach, ſore throat, pain of the neck, pain and ſwelling of the left ancle, and

univerſal pains, were all increaſed by an urgent cough. Languor, dejection, and coſtiveneſs were harraſſing. The countenance was yet diſeaſed: and there was ſomething ſingular about the eyes of one patient, as if he had been afraid when he was ſpoke to. The eruption became livid,* and the tongue had ſtill various appearances: as one black pellicle fell off, another formed very ſlowly on the tongue. Some recovered.

20.—Some paſſed part of the night ill from vomiting and purging. Relapſes; bad taſte of the mouth, ſickneſs at ſtomach, head-ach, ſore throat, cough, giddineſs, and various pains, particularly of the lower extremities; belly-ach, coſtiveneſs, debility, and wandering were very troubleſome, and petechiæ were ſtill obſervable. The eyes were ſunk in the orbits, and the tongue was ſore, chopt, and foul; the itch-like eruptions were thickeſt on the extremities; there were furuncles on the ſhoulders, and exacerbations towards night.

The convaleſcents recovered ſlowly.

21.—Head-ach at times; ear-ach, the univerſal pains, belly-ach, diarrhœa, cough, dejection, and inordinate craving were moſt frequent. There was a remiſſion by ſtools and perſpiration. The ear continued to diſcharge; the livid eruption

* Not the itch-like eruption.

tion was troubleſome; the countenance was yet diſeaſed, and the tongue foul, ſore, and had an uncommon appearance; and the convaleſcents were very languid, and recovered ſlowly.

22.—Sickneſs at ſtomach, head ach, giddineſs, belly-ach, diarrhœa, ſcalding and high coloured urine, cough, dyſpnea, debility, univerſal pains, eſpecially of the upper extremities, were the ſymptoms moſt complained of. There was an unnatural motion of the head and hands, and the tongue was ſtill ſore.

23.—Some paſſed a bad night from belly-ach and diarrhœa. Rheumatic pains, ear-ach, cough, the itch-like eruption, debility, languor, and thirſt were troubleſome. The tongue was dry, but the expectoration was now free and copious.

24.—The head ached, and was confuſed; the eyes watered, the cough was urgent, coſtiveneſs prevailed, and inordinate craving; deſpondency, and depreſſion were diſtreſſing; the countenance was much diſeaſed, though the patient complained little; the mouth and tongue were foul; the thirſt, pulſe, and ſtate of the ſkin varied as uſual: one became ſcorbutic, convaleſcents recovered ſlowly.

25.—Reaching to vomit, head-achs, ear-ach, wandering pains, debility, tenſion of the abdomen, and coſtiveneſs; an urgent cough haraſſed

the ſick—one became ſcorbutic. The tongue was ſtill dry and foul.

26.—Some of the ſick paſſed an indifferent night. Reaching, cough with pain, and ſoreneſs about the breaſt, ear-ach, and proſtration of ſtrength and ſpirits, but eſpecially weakneſs of the loins were the moſt frequent ſymptoms.

27.—Head-ach, coſtiveneſs, pain and ſoreneſs of the abdomen, ſickneſs and languor from ſitting up in the hammoc, cough, debility, and deſpondency were yet diſtreſſing; the eyes were glaſſy, and the tongue was covered at times with a ſlimy mucus.

28.—A very bad night from inquietude:—ſome were languid and depreſſed, and the countenance was yet wild; many of the convaleſcents denied that they ſlept, and the furuncles were not quite healed.

29.—Head-ach, belly-ach, diarrhœa, languor, and the itch-like eruptions, eſpecially about the thighs, were very troubleſome. The tongue had the pomegranate-like appearance.

30.—Some paſſed the night ill from pain and ſickneſs at ſtomach; others from ear-ach, head-ach, deafneſs, or coſtiveneſs. Though the patient thought himſelf pretty well, the countenance was yet diſeaſed. The right ſide of the ſcrotum of one of the convaleſcents, appeared excoriated.

31.—

31.—Relapſe; head-ach at times, ear-ach, pain of the ſide, belly ach, a diarrhœa and craving were obſerved. The ſkin was yet ſallow, but the lips were beginning to recover their natural appearance.

32.—Wandering and delirium in the night; chillneſs, head-ach, pain of the ſide, diarrhœa, and depreſſion continued. The tongue was foul.

33.—Severe head-ach in the morning, a bad taſte in the mouth, and an expectoration of ſomething diſagreeable. Univerſal pains and ſoreneſs, but eſpecially of the ſide and breaſt, and coſtiveneſs prevailed. The countenance was yet wild.

34.—A paroxyſm in the night, ear-ach, coſtiveneſs, and diarrhœa ſtill obſervable.

35.—Bad taſte of the mouth, belly-ach, coſtiveneſs, diarrhœa, dyſenteric ſymptoms ever ſince they were laſt mentioned, and debility were frequent.

36.—Head-ach, cough, coſtiveneſs, and a brown tongue, were now the moſt obvious ſymptoms.

37.—Pains of the hips and cough were urgent in the night, but the expectoration was eaſy and copious; univerſal ſoreneſs and languor were diſtreſſing. One was very louſy, and ſeveral had been ſo.

38.—

38.—Cough and ſlight wandering in the night.

39.—Head-ach in the night prevented reſt; cough, and expectoration, wandering, diarrhœa, haraſſed others; the countenance was wild:—one, when interrogated, ſtarted up ſuddenly, and exclaimed in a loud tone of voice, that he was well. His legs and feet had been cold, he ſaid, twenty-four hours.

40.—The night paſſed ill from raving and inquietude; one patient was greatly emaciated, and louſy. One convaleſcent was coſtive.

43.—The coſtiveneſs continued, and the itching eruption on the thighs.

45. Sent the coſtive patient to ſick quarters for change of air and milk diet.—The patient with eruptions was recovering, and ſent to ſick quarters the 48th day of his illneſs; but he had frequent relapſes during that time. There was one man who did not recover until the 56th day of his illneſs.

SECT.

Section II.

Observations *on the preceding* Description.

THERE are ſome circumſtances in the preceding deſcription, which apparently render the ſhip fever different from thoſe fevers deſcribed in the Phyſical Journal, of which the following are the moſt ſtriking.

1. The long continuance of the ſhip fever on board.

2. The great length of time to which it run in many caſes.

3. The relapſes which many patients ſuffered before they recovered entirely.

4. The frequent attacks of it which ſome men had, when they were in a ſtate of good health.

5. The great variety of eruptions which accompanied the ſhip fever, particularly petechiæ.

Could the firſt of thoſe circumſtances proceed from any other cauſe than infection?—Of which, (though the progreſs and effects were very evident) of its nature or eſſence, or of the manner of its operating on the ſyſtem to produce ſuch a variety of ſymptoms, I am entirely ignorant.

Does

Does not the ſecond originate from the patient continuing, while in a feeble ſtate, to live under the influence of infection?

And do not the third and fourth proceed from the ſame cauſe?

Do not the eruptions proceed from the conſtitution of the patient?—excepting the petechiæ, which frequently appeared with the other eruptions, and ſeem to be, generally, a concomitant of the ſhip fever, when it is treated as we were obliged to do,—and I may add, in the uſual manners of its treatment by other practitioners.

Whether we have, in our queries, ſtated the proper cauſes of thoſe circumſtances, is perhaps of little moment; it is ſufficient that their exiſtence indicates a virulent infection, and the conſequent neceſſity there is for the utmoſt exertion of human ſkill to ſubdue it, or at leaſt to render it as mild as the nature of things will admit.

CHAP.

CHAP. II.

SECTION I.

OBSERVATIONS ON REMEDIES.

BEING convinced by experience that the Peruvian bark alone could be depended on in the cure of fevers in a hot climate, I could not conceive, notwithſtanding the many claſſes of fevers mentioned by authors, and the various methods of cure they recommend, that the ſhip fever in America, when it appeared on board the Juno, differed ſo materially from the fever I had formerly ſucceſsfully managed on the coaſt of Africa, and in the Weſt-Indies,* as to render my treatment of the one improper for the other. I therefore reſolved, after the uſe of moderate evacuations, to place my dependence

* See a Phyſical Journal, kept on board his Majeſty's ſhip Rainbow, during three voyages to the coaſt of Africa and the Weſt-Indies, in the years 1772, 1773, and 1774. To which is added, a particular account of the remitting fever on board the Weaſel, on that coaſt, in 1769. *Lond.* 1777.

on the bark; and this reſolution I adhered to as long as my ſtock of bark would permit me, which was until the end of December, 1776.—Afterwards it was in particular caſes only that I could adminiſter it.† Whether the ſucceſs of this practice juſtifies my reſolution, I leave to the impartial reader to decide from the whole facts hereafter ſtated.

But the advocates for camphire, antimony, bliſters, &c. may probably deny that I wholly depended on bark, ſeeing I frequently joined one or other of thoſe along with it.* This argument ſeems at firſt ſight to have weight; but will avail them little if the following circumſtances are duly conſidered.

Firſt—Until a very ſhort time before the marine died on the 13th of October, I was neither aware that the fever was on board, nor that the patient was dangerouſly ill; and he took no bark.

Second—Seeing then that the men were daily ſeized with the fever; and reflecting at the ſame time, that many of the people might not only be infected, but that it might be a long, tedious, taſk to ſubdue the infection, I joined the other medi-

† When we arrived at New-York, bark was a guinea per pound—a price ſufficient to tempt the ſellers to adulterate it.

* See Caſe I.

medicines with the bark to make it hold out, and not from an opinion that they would render it more efficacious. The tartar emetic was joined with it as the moſt convenient evacuant; as it neither added to the bulk of the doſe, nor altered the taſte for the worſe. And ſurely no man would debar me from keeping up the natural evacuations and ſecretions, or from promoting them when they were ſuppreſſed, during the patient's cure, whatever were the medicines I depended on.—But

Third—Should thoſe circumſtances not alter their opinion, I refer them to the caſes of the patients differently treated, and to the fifth table, where they will ſee clearly the different events.

Bliſters, when applied in the beginning of the fever, carried it entirely off in many caſes,* eſpecially if they were then applied on account of the head-ach,—otherwiſe they produced little or no effect, either by ſtimulation, or the ſubſequent diſcharge.

SECT.

* This is agreeable to what Dr. Lind has ſaid of Bliſters, in his Diſſertation on Fevers and Infection.

SECTION II.

METHOD OF TREATMENT WITH BARK.

BEING in so high Northern latitudes, I imagined that the sick in the beginning of their fever would have received benefit by taking away a little blood; but from repeated trials, I found I was mistaken: for though the pulse and other symptoms seemed to indicate the necessity of diminishing its quantity, scarcely one patient could bear the loss of a few ounces, without either becoming languid or faint, and complaining more afterwards of debility than other patients. Thus I was taught to withhold the lancet; and am now thoroughly convinced that it will not be necessary in one case among a hundred of a ship-fever, to let blood.—The appearance of the blood that was taken away, has already been mentioned in the Diary of the Sick List, part I. c. ii. § 2.

I therefore began generally with a vomit of pulv. ipecac. gr. v. and sometimes tart. emet. gr ß. which was repeated every half hour, until it operated—either of which was wrought off in the

the common way, with warm water*; and in the evening gave one of the following ſudorifics, and ſage or mint tea, or barley-water, to drink after it, through the night.

℞ Sal C. C. gr. v.
Opii, gr ß. fiat bolus.
Vel Tart. emet. gr. i.
Opii, gr ß. fiat bolus, hora ſomni deglutiendus.
Vel Eſſent. Antim. Huxham, gut. xv—xl
Tinct. Theb. gut. xv—xxx ſecundum ægri ætatem,
Aq. ſimp. ℥ iß.
Syr. com. q. ſ. fiat hauſtus, hora ſomni ſumendus.

It was ſeldom thought neceſſary to repeat the vomit, in the courſe of the fever.

If blood was taken away in the morning, the emetic was preſcribed a few hours after, and the ſudorific at bed-time. Otherwiſe, when the patients complained in the afternoon, and blood was taken from them, the ſudorific only was adminiſtered that night, and the emetic next morning.—Unleſs that procured them ſeveral copious ſtools, within a few hours after its operation, I ordered

℞ Sal

* A vomit, when given upon the firſt appearance of chillneſs or ſhivering, (agreeable to Dr. Lind's doctrine) entirely cured numbers of patients.

℞ Sal. cath. amar. ℥i.
Cryſtal. Tart. pulv. ℥ij.
Aq. ſimp. bullientis, ℥iv. fiat ſolutio, et adhuc tepida, bibenda; ac poſtea, ad libitum, pulmentario tenui utantur.

But in ſome caſes the cathartic ſolution was divided into four parts, and Cort. Peruv. pulv. ℥i. adminiſtered with each every hour, until it was all taken. At night the following draught was frequently preſcribed.

℞ Tinct. Cort. Per. Huxham. ℥iij.
—— Serp. Virg. ℥i.
—— Theb. gut. x—xxx
Aq. ſimp. ℥iß.
Syr. com. q. ſ. fiat hauſtus.

And in ſeveral caſes, when the head-ach was violent a bliſter was applied to the back.

Next day, being the third, and in ſome caſes the fourth of the complaint, I preſcribed the bark.

℞ Pul. Cort. Peruv. ℥i.
Aq. ſimp. ℥iß. fiat hauſtus; ſed, ut viſum, Elix. Vit. gut. vi.—vel Tinct. Theb. gut. xx. addendo.

This draught was taken every hour, or every two, three or four hours, as was thought proper; but two ounces of the following decoction with the elixir of vitriol, or tinct. theb. was more generally ordered, after the ſame manner.

Cort.

℞ Cort. Peruv. craſſ. pulv. ℥iv.
Eleuther. craſſ. pulv. ℥ij.
Aq. ſimp. cong. iij. coque ad cong. ij.
et cola.

But the bark was always, for the worſt caſes, preſcribed in ſubſtance.—In caſes of conſtipation I joined either from ten to twenty grains of rhubarb, or more frequently ſal. cath. amar. ℥ij. —℥ ß; and ſometimes tart. emet. gr. ¼—gr. ß. When violent pains were complained off at night, I ordered the following anodyne bolus.

℞ Camphor. gr. iv.
Opii, gr. ß—gr. i. ut viſum, f. bol.

And for the convaleſcents, I ordered an opiate regularly every night.

The drink was either one of thoſe I have already mentioned, or very thin gruel; and thoſe were ſometimes acidulated, and ſometimes had nitre joined to them.—Clyſters and pediluvia were made uſe of as occaſion required.

This was the manner in which I treated the ſick until they recovered; but in the mean time I allowed to thoſe patients, whom I thought the propereſt objects, a little wine from time to time; and when they arrived at a convaleſcent ſtate, their diet was the moſt proper that circumſtances would admit.

I muſt, however, acknowledge, that I was much vexed to find the fever was far more obſti-

nate,

nate, and more difficult than it was on board the Rainbow.

Query—Did this proceed from the difference of climate—of the conſtitution of the patients—or of the nature of the infection?

And what was no leſs perplexing, the patients would often relapſe from very ſlight cauſes, when they were nearly recovered.

But the method of treating this diſeaſe will be more fully explained in the following caſes.

SECTION III.

CASES OF THE FEVER TREATED WITH BARK.

CASE I.

THO. Lawſon, a marine, aged about thirty, was ſeized in the morning of the 21ſt of October with ſhivering, head-ach, ſickneſs at ſtomach, and univerſal pains; and complained in the afternoon. The pulſe was then ſmall and quick.—Emet. ſtatim cepit; et poſtea, potione diluente utitur.

2. The vomit operated well, and he ſweated in the night, and ſeemed a little relieved. Sal. cath. amar. ℥i. dedi:—4 pm. a ſevere paroxyſm came

came on, with ſhivering for four hours. Sudorificum h. ſ. deglutiit, et veſicatorium inter ſcapulas fuit admotum.

3. He paſſed the night very ill from great heat and inquietude. No perſpiration. Decoct. cort. Peruv. ℥ij. Tart. emet, gr.ſs. ſexties in die cepit.—4 pm. he became chilly again for a little, and thought himſelf better, though he complained of pain about his eyes, and was much dejected. The pulſe was ſmall, and quick, and petechiæ appeared upon him.

4. Perſpiration was perceived on him at midnight; and early am. the head-ach and pain about his eyes increaſed, the countenance was much diſeaſed, and bloated; he raved; the ſkin was hot, and he was thirſty. Medicinam ut heri cepit. At 2 pm. a ſevere exacerbation began: he had three ſtools, and a ſcalding from the bliſter. Camphor. gr. v. boli forma, h. ſ. cepit ac pediluvio utitur.

5. He ſweated a little, but paſſed a very indifferent night from inquietude, and was no way relieved, except of the ſcalding. Decoctum ex Tart. emet. adhuc cepit, et ex tinct. ſerp. Virg. ʒß. et h. ſ. bolum camphor. ſumpſit.—In the afternoon he had leſs pain, the pulſe was firmer, but the petechiæ were more numerous.

6. He became eaſier after reſting the firſt part of the night, but the pulſe was ſtill quick and hard. Omni modo ut heri præſcripſi. Be-

tween three and four, pm, a paroxyſm came on, which affected the head much: diarrhœa and belly-ache at times.

7. At midnight there was a remiſſion, during which the head-ach, heat and thirſt were urgent, and he was haraſſed with a cough. Decoct. cort. ℥ij. pulv. ſal. nitr. gr. x. miſ. quinquies in die cepit, et anod. h. ſ.—veſicatorium renovatum fuit. He was chilly at times through the day, and purged frequently.

8. Head-ach, great depreſſion, giddineſs and thirſt were troubleſome; the tongue ſeemed ſtriped red and white, and a little enlarged.—Camp. gr. v. quartaq; hora præſcripſi cum potione nitroſa.

9. He paſſed the firſt part of the night ill from inquietude. AM. he had an unrefreſhing ſleep, and afterwards rambled much. His voice became very rough, his tongue was black, the teeth covered with ſordes, attended with loſs of taſte; the countenance was ſallow, and much bloated, his eyes exceeding dull, the pulſe languid, and the ſkin dry and hot; but he did not complain of any thing.—Pulv. cort. Peruv. ʒi. Tart. em. gr. ¼. vin. rub. Oport. ℥iß. tinct. ſerp. ʒi. quaq; hora præſcripſi. PM. he ſpoke wildly and the tongue was black, but the pulſe was firmer, and the voice natural. His body was open.

10.

10. There was a remiſſion all night, and towards morning he ſlept, having afterwards a copious ſtool. In the afternoon he was much better, and recovered his natural voice and taſte, but he felt the univerſal pains. Ut heri medic. cepit, ac camph. gr. v. h. ſ.

11. He complained of univerſal ſoreneſs, and took his medicines with reluctancy. PM. his head ached at times, and he was giddy at others, uneaſy, and deſirous to ſleep; the tongue was clean, but chopt, and he continued better in every reſpect, having had two copious ſtools.—Medicinas tertia quaq; hora præſcripſi, ac bolum h. ſ. ex anodyn.——Diæta tenui ſed nutriente utitur.

12. He perſpired and ſlept in the night, but denied it, and expreſſed a great deſire to ſleep; his tongue was dry, and rather black, with ſordes about the teeth when he awoke. His body was open, and his countenance became lively. White ſpecks appeared on the bliſtered part of the back, which diſcharged freely.—Decoct. cort. Peruv. ℥ij. pulv. cort. ʒß. tart. emet. gr$\frac{1}{4}$. quinquies in die cepit, et aliter ut heri et vin. paux. ſubinde. PM. he continued recovering, but complained of a cough, probably from being got on deck while the ſhip was ſmoking.

13. He had a tolerable night, but denied that he ſlept; perſpired freely, and had a copious ſtool:

ſtool: but his bones ached, he ſaid.—Medicinam quater hodie cepit, et anod. h. ſ.

14. He reſted well, his tongue healed and became clean ſlowly, but he was ſenſibly recovering: tho' he was not quite free of the fever until the 22d. The moſt evident ſymptom about him of the fever, was his tongue when he awoke, which was covered with a black bliſter.

He continued to recover until the 30th, when he relapſed with ſhivering and delirium;—perhaps from his bedding being waſhed (without my knowledge) and not thoroughly dried, by his meſſmates, becauſe he was louſy. The ſymptoms moſt urgent were, a pain of his ſide, univerſal pains, a tooth-ach, and frequent chilneſs: he was gently vomited and purged, and had a bliſter applied to his ſide; the decoction of bark was given after the ſame manner as before, but he continued to recover but ſlowly until the 27th, when he was ſent to ſick quarters at Halifax, for a change of air, and milk diet.

CASE II.

James Jourd, aged about 29, a very irregular fellow, was ſeized the evening of the 28th of October, with a ſhivering for four hours, a ſickneſs at ſtomach, reaching, and a ſevere headach; which were followed by heat, uneaſineſs, and

and inquietude. When he complained on the 29th, he looked wild, and was much dejected. Emet. ſtatim; ac hora ſomni ſal. C. C. gr. v. opii gr ß. boli forma cepit, ſuperbibendo menthæ infuſionem ad libitum.

2. The emetic, which was five grains of ipecacucan, purged as well as vomited him; and he ſweat profuſely from the bolus, which relieved his head; but the anxiety continued, and the countenance was much diſeaſed. Dyſenteric ſymptoms were diſtreſſing, and the pulſe was quicker and harder than uſual. Dec. cort. Peruv. ℥ij. quater in die dedi, et anod. h. ſ.— PM. he was hot, and looked as if he had been drinking.

3. He paſſed an indifferent night from heat, thirſt, and inquietude; but the griping and purging were abated. Decoct. cort. Peruv. ℥iß. tart. emet. gr$\frac{1}{4}$. ut viſum, ſexies in die præſcripſi. PM. he thought himſelf better, though he was ſtill very feveriſh.

4. The purging was troubleſome, his ſkin was hot, thirſt frequent, and the pulſe hard.— Decoct. ſine tart. emet. dedi, opii gr ß. ut viſum. PM. he was better.

5. Thought himſelf relieved, though he was very hot, thirſty, looked bad, and voided porraceous ſtools. Ut heri præſcripſi. PM. an hæmorrhage from the noſe, and the purging abated.

6. He

6. He had only two ſtools in the night, and reſted well; but his countenance ſtill ſeemed greatly diſeaſed; he was ſick at ſtomach, and reached at times from urgent cough; his tongue was foul, and the thirſt great.—Ut heri præſcripſi et vini pauxillum, vel tinct. cort. bis in die. PM. he was free from reaching.

7. He was eaſy after a good night, but was ſtill hot and thirſty, and the tongue was duſky in the middle.—Decoct. cort. ℥ij. pulv. cort. ʒß. tart. emet. gr. ¼. m. quinquies in die bibit, et op. ut viſum. PM. his belly ached a little at times. Camphor. bol. gr. v. opii gr. ½. h. ſ. Potio fuit diluens et refrigerans.

8. His countenance and tongue were extremely diſeaſed, he perſpired irregularly, his pulſe was rather quick and ſmall, but he complained only of being coſtive.— Pulv. cort. Peruv. ʒi. tinct. cort. ʒij. tart. emet. gr. ¼. aq. ſimp. ℥iß. ſyr. com. ʒiß. miſce: ſecunda quaq; hora ſumpſit. Veſicator. inter ſcapulas etiam admovi. PM. he was not relieved.

9. He perſpired a little in the night, and he had a ſtool in the morning; the tongue was enlarged, brown, and chopt.—Serpent. Virg. decoct. et cort. Peruv. (vide Ephemeridem) quarta quaq; h. cepit, et opii gr. i. h. ſ. PM. his pulſe was quicker and irregular, but he always ſaid he was better, when his health was enquired after. Had ſeveral ſtools.

10. He

10. He had a ſtool, was delirious, and very reſtleſs the firſt part of the night. AM. the pulſe was more diſtinct, but weaker, and the ſkin was moderately cool; but he lay on his back, as on the two preceding days, with his mouth wide open, by which means his tongue and throat were ſo dry, that he could not ſpeak until they were moiſtened, and then ſcarce intelligibly. He felt his bliſters pain him, and was fond of apples, which I allowed him as he choſe. Omni modo ut heri præſcripſi. PM. he had a ſtool; there was a black pellicle on the tongue, the pulſe was irregular and quick; he had frequent ſtartings, was greatly depreſſed, and covered with petechiæ of different ſizes and ſhapes. Pulv. cort. Peruv. ʒij. tart. emet. gr. ¼. vin. Canar. ʒij. (et tinct. theb. gut. xx. ut viſum) ſecunda quaq; hora ſumpſit.

11. He was much relieved after a good night; he ſpoke, and was in good ſpirits; the pellicle, or rather thick black cruſt, began to caſt off from the tongue, and the pulſe was firmer.—Cort. ut heri pomeridiano cepit. PM. a moſt violent exacerbation came on, with deafneſs and an effuſion of tears; neither the mouth nor teeth could be kept clean, the pulſe was very ſmall, and he was coſtive.—Camphor. gr. v. h. ſ. deglutivit. I ſuſpected that his meſſmates had given him grog.

12. A

12. A ſlight remiſſion, the pulſe being firmer, and the countenance leſs ghaſtly; he was coſtive, and always ſaid he was better,—Enema fuit adhibitum, et decoct. ſerp. Virg. et ſp. C.C. gut. xxxv. quarta quaq; hora præſcripſi. PM. he had two ſtools, in the firſt there were hard lumps; he coughed and ſpit up with the utmoſt difficulty, a blackiſh and very tenacious ſtuff, but complained of no pain; ſpake clearer, and the pulſe became ſtronger.—Cort. et vin. cepit et camph. gr. vi. h. ſ.

13. He paſſed a good night, and was much relieved; the tongue was very ſore wherever the cruſt appeared. PM. the body was open, and the pulſe full and quick.

24. There was a perfect remiſſion after ſleeping and perſpiring freely in the night. The tongue was now much ſmaller, but the cruſt ſeparated very ſlowly.—Cort. et vin. ac tart. em. dedi ut heri: diæta tenui et levi utitur. PM. his body continued open, and he was cool and eaſy. H. ſ. ut poſtrema nocte.

15. He paſſed a good night, ſweated, and had a ſtool, though he was diſturbed by the ventilator.—Ut heri, et gargariſma utitur. PM. a violent paroxyſm, I ſuſpected, was brought on by grog. The countenance was flushed, and the eyes much inflamed; the pulſe was rapid, tremors were diſtreſſing, and he groaned often.

16. He

16. He ſlept and had a ſtool in the night; the ſkin was hot, the pulſe quick and irregular, and he ſpake indiſtinctly; the countenance was much diſeaſed; he was again become a little deaf, and though he thought himſelf better, he was anxious to know if he ſhould recover.—Decoct. cort. ℥ij. pulv. cort. ʒß. tart. emet. gr$\frac{1}{4}$. miſce; ſexties in die bibit, atq; tinct. theb. ut viſum, et vini paux. ſubinde. PM. the tongue was black, the groaning continued, and he was inclined to ſleep. The body was open. Camp. atq; anod. h. ſ. cepit.

17. He had two ſtools, and reſted tolerably in the night; he coughed and expectorated a laudable pus, and could now put out his tongue, which was blackiſh; and though the ſkin was cool, there was a diſagreeable quickneſs in the pulſe. His body was open; and he eat ſome pancake given him by his meſſmates.—Ut heri præſcripſi.

18. He reſted ill from his bones aching, he ſaid, from lying in bed; the tongue had the pomegranate appearance, and the pulſe ſmall and quick. Cort. ut heri, (ſed ſine tart. emet.) et camp. h. ſ. dedi. PM. he groaned without pain, perſpired freely, and began to recover his appetite, but ſtill had many petechiæ on him. Anod. h. ſ. ſumpſit.

19. He complained of hunger, after having two ſtools, and paſſing a good night; but one

cruſt continued to ſucceed another on his tongue, which gradually became black, though the pulſe was moderate, and his ſkin cool.—Ut heri omni modo.

20. His voice was now become natural, but the tongue was ſore and black.—Corticem adhuc cepit. PM. he was hot and uneaſy, I believe from irregularity. Anod. h. ſ. ſumpſit.

21. He was eaſy and cool, after having a ſtool, and perſpiring in the night.—Medicinam ut 18vo. præſcripſi.

22. The tongue cleaned and healed ſlowly.—Ut heri.

23. He continued to recover. Ut heri adhuc.

24. The pulſe became quick, the skin was hot, the tongue and mouth were foul, perhaps from irregularity, but he expectorated laudable pus with his cough.—Decoct et pulv. cort. adhuc, ut 18vo. ſumpſit.

He continued to recover, though ſlowly, until the 29th, when I ſent him to ſick quarters; towards night he became a little hot. I gave him the bark through the day, and an anodyne at night.

CASE III.

Daniel Wilkins, a marine, aged about 28, a very irregular man, complained the 10th of Oct. 1776,

1776, of head-ach and purging.—Emet. ſtatim, ac anod. h. ſ. cepit.

2. Griping was moſt troubleſome.—Sal. cath. amar. ℥iß. præſcripſi, et anod. h. ſ. cepit.

3. He complained more of heat, thirſt and head-ach, than of purging; his pulſe was fuller and quicker than natural.—Sal. nitri, gr. x. quater indie, atq; potion. com. dedi.

4. The head-ach was ſtill haraſſing.—Ut heri; ac tinct. cort. Peruv. ℥ij. ſerp. Virg. ℥i. theb. gut. xv. aq. ſimp. ℥iſs. ſacch. alb. ad gratum ſaporem; fiat mixtura, h. ſ. cepit.

5. He had no complaint. PM. his throat was a little inflamed.

6. The inflammation was much the ſame, the uvula was relaxed, and he had no appetite.—Cort. Peruv. decoct ℥ij. elix. vit. gr. v. quater in die ſumat.

7. He was recovering.—Ut heri, bis in die præſcripſi.

8. He returned to duty.

9. He was irregular yeſterday, and relapſed at 2 pm. but did not complain until this day pm. of alternate chills and heats; of ſickneſs at ſtomach, head-ache, univerſal pains, heat, and great thirſt.—Emetic ſtatim dedi; poſteaq; potione diluenti utitur.

10. The vomit operated upwards and downwards, but the head-ach, continued. Cort Peruv.

decoct. ℥iſs. elix. vitr. gutt. v. quater hodie ſumat. PM. he was not relieved.—Tart. emet. gr$\frac{1}{2}$. tinct. theb. gut. xx. h. ſ. cepit.

11. His head ach remitted in the night.—Ut heri omni modo præſcripſi. A paroxyſm returned at 4 pm. with pain of the limbs.

12. The head-ach continued with giddineſs and a cough.—Cort. Peruv. decoct. ℥ij. tart. gr$\frac{1}{4}$. ut heri ſumat. atq; potion. nitros. Veſiccat. inter ſcapulas admovi. PM. no remiſſion.

13. He was relieved of his complaints, and was eaſy and cool.

14. On recovery, decoct. ut heri, atq; elix. vit. præſcripſi.—From 9 am. to 6 pm. he was chilly and giddy.

15. Complained of debility and univerſal foreneſs.—Ut heri.

16. On recovery, decoct. atq; elix. vit. adhuc cepit. PM. he was irregular.

17. Continued to recover.—Ut heri. At 5 pm. he became chilly, and his head-ach returned. Tart. emet. gr.ſs. h. ſ. cepit.

18. He became eaſy at midnight.—Decoct. atq; elix. vit. quater in die dedi.

19. He was hot in the night. The itch-like eruption had been troubleſome for ſome time.—Ut heri.

20. He was recovering.—Decoct. et elix. vit. bis in die ſumat.—PM. a paroxyſm came on. Tart. emet. gr.ſs. h. ſ. ſumat.

21. About

21. About midnight there was a remiſſion, with debility.—Decoct. atq; elix. vit. quater in dies ſumat. PM. ſickneſs at ſtomach, head-ach, and univerſal pains returned. Anod. h. ſ.

22. He reſted well the fore part of the night, but complained of weakneſs, giddineſs and ſickneſs at ſtomach; his pulſe was quick and feeble. Decoct. ſexties in die dedi. PM. no remiſſion, and a diarrhœa was troubleſome:—Opii gr.ſs. ut viſum, atq; decoct. præſcripſi: veſicator. inter ſcapulas admovendum, et ſal. C.C. gr. v. opii gr.ſs. h. ſ. ſumendus; ſuperbib. menthæ infuſ. ad libitum.

23. A ſlight remiſſion, tho' he was diſturbed in the night; he did not ſweat, but the thirſt continued. Ut heri atq; tart. emet. et decoct. quater in die cepit. PM. he was chilly all day, though he was relieved.

24. He complained leſs of his head-ach, but his ſkin was hot, the thirſt urgent, his pulſe quick and ſmall, and he was greatly depreſſed. Ut heri præſcripſi. PM. an exacerbation came on, and his head was confuſed and diſturbed.

25. He was not relieved; an urgent cough, and thirſt haraſſed him; his tongue was dry and white, and he was very feeble. Pulv. cort ʒ ß. et cort. decoct. ℥ij. quater in die dedi.

26. He

26. He reſted ill from having a bad birth, and complained of much pain and ſoreneſs about his breaſt, eſpecially when he coughed; but the pulſe was moderate. Linct. emol. (atq; nit. et tart. emet.) q. n. m. quater in die ſumend. ſuperbib. pulv. cort. ʒi. vin. rub. ℥iſs. fiat hauſtus. PM. he vomited twice from the linctus.—Omitted the nitre.

27. He paſſed a good night, having perſpired freely, and had a copious ſtool. A remiſſion of the ſymptoms:—PM. a ſlight exacerbation, but he was ſick from ſitting up in his hammoc.

28. He had a quiet night, but was very languid, dejected, and looked wild; his body was lax. Rad. ſerp. Virg. contus ℥iſs. aceti lb. iv. coque ut ſint colaturæ lb. ii. cui adde pulv. cort. ℥i. ſyr. ſimp. ℥iv.* coch. ij quartaquaq; hora capiat, atque vini paux. ſubinde. PM. his ſkin was cooler and ſofter, but the pulſe languid, and he was frequently purged. Opii gr. ſs. cepit.

29. He complained of weakneſs and the itching eruption only; but the countenance was much diſeaſed, and his tongue had the pomegranate appearance. Ut heri.—PM. no alteration, but he had four ſtools. Pulv. cort. ʒi. tart. emet. gr. ¼. tinct. theb. gut. xx. vin. alb. ℥ij. m. fiat

* This is a decoction of Dr. Lind's. See his Diſſertation. chap. i. ſect. 2.

fiat hauſtus, ſecunda quaq; hora ſumend.—pomis libere utitur.

30. He complained only of his bliſter and thirſt, but he ſtill appeared to be much diſordered; the diarrhœa continued, and his pulſe was feeble. PM. the diarrhœa ſtill continued, but his tongue was clean; he became ſomewhat deaf.—Anod. h. ſ. cepit.

31. He ſtill looked wild, and was thirſty, craving for different things. Ut heri quarta quaque hora præſcripſi. PM. the diarrhœa continued, his lips were regaining their natural colour, but he was otherwiſe quite ſallow. Anod. h. ſ. cepit.

32. The diarrhœa harraſſed him in the night, and he was thirſty. Ut heri atq; opio ut viſum. PM. he was much the ſame. Anod. h. ſ. atque camp. gr. vi.

33. He paſſed a tolerable night, and complained little, though he was thirſty, and looked wildly. Ut heri. PM. he had four ſtools in the day. Anod. atq; camp. h. ſ. ſumpſit.

34. He continued to look ſallow and wild, and complained of thirſt and deafneſs; his tongue was white. Omni modo ut heri. PM. the diarrhœa was yet troubleſome. Anodynum h. ſ. ut ſupra.

35. He did not ſleep, but was quiet in the night. Ut heri adhuc. PM. the diarrhœa continued, and he dozed Anod. ut 33.

36.

36. He had a good night, and complained of nothing; but his pulſe was feeble, his countenance diſeaſed, and his tongue brown, and he dozed at times. Ut pomeridiano 29ni. preſcripſi. PM. no alteration. Anod. h. ſ.

37. His cough diſturbed him in the night, and he complained of debility, and of pains in the hips; and expectorated pretty freely. Ut heri, ſed ſine tart. emet. PM. he began to look better, but his cough was urgent. Anod. h. ſ. cepit.

38. He paſſed an indifferent night; the cough and expectoration continued. Decoct. ℥ij. pulv. cort. ℈ij quater in die ſumat; vino etiam adhuc utitur. et anod. h. ſ.

39. The cough and expectoration continued, and he had two ſtools in the night; he raved towards morning, and looked wild:—when aſked how he was? he anſwered, loud—that he was brave, ſtarting up at the ſame time. Omiſſis med. vini paux. ſecunda quaque hora dedi. PM. he ſaid his feet and legs had been cold the laſt twenty-four hours. Anodynum h. ſ. cepit, et pediluvio utitur.

40. He paſſed a reſtleſs night from inquietude and raving, and he was greatly emaciated and louſy. Ut heri præſcripſi, tertia quaque hora, et ut 38vo. præſcripſi quater in die, et pediluv. et anod. h. ſ.

41. He

41. He reſted badly from raving, and ſlept am. the expectoration with the cough continued, and his cravings. PM. the cough was troubleſome, but his appetite began to return Ut heri.

42. He had a good night, and perſpired; he looked better, his pulſe was firmer, and his ſkin warm. Ut heri adhuc. PM. he continued better.—Anod. h. ſ.

43. He continued to recover, but found the eruption ſtill troubleſome.—Ut 39 præſcripſi.

44. Recovering.—Ut ſupra.

45. He recovered ſlowly.—Ut heri.

46. He continued to recover. Ut heri.

47. Still recovering.—Ut heri.

48. I ſent him to ſick quarters for the ſame reaſon I had ſent Lawſon and Jourd.

CASE IV.

William Hurd, aged about 25, of a thin habit, was ſeized the 11th of October, with headach, puking, and univerſal pains. Emetic. ſtatim dedi.

2. He complained much leſs, and the vomiting ceaſed. Sal. cath. amar. ℥i. ſump.

3. His head was ſtill affected, though he ſweated thoſe two nights paſt. Sal. nit. gr. x. quater hodie ſumatur.—Tinct. cort. ℥iij. tinct. ſerp. Virg. ℥i. theb. gut. xii. f. h. ſ. a. h. ſ. ſumendus.

4. He ſlept in the night; but now complained of more head-ach, of pain about his eyes, of heat, thirſt, and of his urine ſmelling ſtrong; his ſkin was dry, and his pulſe quick and ſmall. Cort. Peruv. pulv. ʒi. elix. vit. gut. vi aq. ſimp. ℥iſs. miſce quater indie ſumendus. PM. he was not relieved. Potione ſubacida utitur.

5. He was much relieved after having paſſed a good night; but his head-ach ſtill haraſſed him, and he was feeble. Decoct. cort. Peruv. ℥ij. quater in die præſcripſi. Diæta ſit tenuis et levis. PM. the paroxyſm continued twenty-four hours.

6. On recovery. Ut heri præſcripſi.

7. He complained of weakneſs. Ut 5 medicinam cepit. PM. he became hot, thirſty, and felt his head light. Cum decocto ſuo, hora decubendi, tart. emet. gr. ¼. dedi.

8. There was a remiſſion at midnight. Ut heri decoct. ſumat. PM. He complained of weakneſs only.

9. He paſſed a good night, and was eaſy. Decoct. adhuc cepit.

10. He was recovering. Ut heri præſcripſi.

11. He was feeble. Ut ſupra decoct. ſumſit.

12. He recovered.

CASE

CASE V.

John Dance, aged about 30, of a bloated habit, with venereal eruptions, complained, the 12th of October, of the head-ach, ſickneſs at ſtomach, univerſal pains, and ſevere gripes. Emet. hodie dedi.

2. His head was ſtill much affected. Cath. hodie cepit. PM. tinct. cort. ʒiij. ſerp. Vir. ʒi. theb. gut. xv. aq, ſimp. ℥ſs. ſacch. alb. q. ſ. m. f. h. ſ. ſumendus.

3. He was relieved in the night of a pain in and about the left eye, which had affected him, but complained of griping and purging. Pulv. cort. Peruv. ʒi. quater indie aq. ſimp. ℥iſs. dedi. PM. he was much better.

4. He was now free from the dyſenteric complaints, and was recovering. Decoct. cort. ut Heri præſcripſi.

5. He continued to recover. Ut heri decoct. cepit. PM. he became hot and thirſty.

6. He paſſed an indifferent night from the fever and head-ach. Ut heri. At 8 pm. he was much relieved; the paroxyſm continued about 12 hours.

7. He ſweated profuſely in the night, and his lower extremities were painful. Ut heri adhuc. PM. the perſpiration continued all day, and he found himſelf feeble.

8. He was eaſy, but continued to ſweat. Decoct. atque elix. vit. cepit. At ten this morning a paroxyſm returned, with ſhivering, and he was chilly all day. Tart. emet. gr$\frac{1}{4}$. atque. decoctum ſumpſit.

9. At 8 laſt night a remiſſion came on; but the forehead ached, and he was giddy. Decoct. cort. ut ſupra præſcripſi. PM. he had an exacerbation of the head-ach for three hours.

10. At 7 p m. an exacerbation of the head-ach came on. Decoct. cort. atque tart emet. ſumat. PM. the head-ach diſtreſſed him.

11. The head-ach remitted at eight laſt night, and he continued eaſy after a good night. Decoct. adhuc quater indies ſumat.

12. He was recovering. Ut heri. He thought himſelf a little chilly in the forenoon, but had no fever on him.

13. He returned to duty.

CASE VI.

William Folkes, aged about 32, was ſeized the evening of the 13th of October, with chillineſs, which was ſucceeded by a hot fit, and a profuſe ſweat—he again became chilly, and complained of the head-ach, lumbago, and thirſt. His ſkin was hot, and his pulſe quicker than natural. Emet. ſtatim dedi.

2. He

2. He complained of the head-ach being ſevere, but otherwiſe he was relieved. Sal. cath. am. ℥ij. ſnmat.

3. He complained of the head-ach and thirſt. Cort decoct. ℥iſs. elix. vit. gr. vi. quater in die cepit.

4. His head-ach continued. Ut heri. PM. his left ear became painful.

5. There was an exacerbation at 8 laſt night, which remitted about noon; but the heat and thirſt continued. Decoct. adhuc cepit.

6. Yeſterday, in the evening, an exacerbation returned, and he became eaſier at midnight. Medicin adhuc cepit. PM. the head-ach was troubleſome at times, particularly the left ſide.

7. The head-ach remitted at midnight. Decoct. quater hodie ſumat. PM. the uſual exacerbation returned.

8. His head was ſtill affected, eſpecially towards night. Ut heri.

9. He recovered very ſlowly. Decoct. adhuc præſcripſi. PM. he continued to recover, but complained of a cough.

10. He was recovering. Ut heri.

11. He recovered.

In four days he relapſed, and was much worſe than before. I treated him as I had done formerly, only that he took the decoction of bark oftener, and ʒſs. of the powder with every doſe. On the 27th day from his being firſt

ſeized,

ſeized, he was pretty well recovered, when I ſent him to ſick quarters for the reaſon I did the former patients.

CASE VII.

M. L. aged about 20, who lay in a birth with a ſick meſs-mate, felt a pain of his back for two days, with loſs of appetite, and laſſitude; and was then (Oct. 21) ſeized with the head-ach and ſickneſs at ſtomach—his pulſe was quick, and rather hard. Emet. ſtatim dedi et ſudorif. h. ſ.

2. He found himſelf relieved after perſpiring in the night. Sal. cath. am. ℥i ſumat ac ſudorif. h. ſ. repetivi. PM. he neglected taking the ſalts, and there was an exacerbation. Veſic inter ſcap. admov.

3. He complained greatly of the head-ach, and was much depreſſed. Sal cath. ℥i. cryſtal. tart. ℥ij. cepit. PM. a remiſſion came on.

4. He had a pain, at times, over one or the other of his eyes; he was feeble and dejected, and his pulſe varied. Decoct. cort. ℥ij. ſal. nit. gr. x. quater in die cepit. PM. there was no alteration.

5. The pain affected the right ſide of the head, eye and neck; and darted through to the left temple, upon turning his head—he was coſtive.

coſtive. Sal. cath. am. ℥ſs cepit, aliter ut heri. PM. the pain continued.

6. His head ached on turning it round. Decoct. atq; elix. vit. gt. xi. quater in die ſumat. PM. he complained of more head-ach after drinking a little grog. Pediluv. utit.

7. The head-ach, debility, and dejection ſtill continued. Ut heri.

8. There was no alteration, and he was coſtive. Ut heri atq; cath. leni.

9. He complained much of his head-ach at times, and found it preceded by a ſtiffneſs of his neck. Decoct. cort. atq; nit. ſumat quater in die: et vini pauxillum ſubinde.

10. An exacerbation of his head-ach returned at 4 am. without the ſtiff neck. Ut heri ſed decoct. ſexties atq; tart. emet. gr$\frac{1}{4}$. ut viſum, dedi. PM. there was a remiſſion at noon, and he was feeble and giddy.

11. He was eaſier, but complained of pains in his joints, and ſickneſs at ſtomach. Decoct. cort. atq; elix. vit. aliter ut 9 præſcripſi.

12. The ſickneſs continued, with an uneaſy ſenſation about the præcordia, and pain of the neck. Pulv. ipecac. gr. v. dedi. PM. he was much relieved by the emetick. Sal. C. C. gr. opii grſs. in boli forma h. ſ. deglutivit.

13. An exacerbation of the head-ach returned at

at midnight, and his joints were feeble. Decoct. ſexties in die ſumat, atq; vin.

14. He complained of heavineſs, giddineſs, debility, and depreſſion. Ut heri. PM. an exacerbation of the head-ach came on. Anodyn. h. ſ. cepit.

15. He paſſed a bad night from the violence of the head-ach; a ſore throat, (which had been troubleſome for two days before, though he did not mention it) and great depreſſion. Veſic. inter ſcap. admovi, camph. gr. 4, tart. emet. gr$\frac{1}{4}$. boli forma quarta quaque hora deglutiit ſuperbib. cort. decoct. ℥ij.—aliter ut 9. AM. he felt himſelf rather cold; pm. he was relieved.

16. He was hot, thirſty, and coſtive. Pulv. rhæi ʒſs. cepit. PM he was eaſy, but his ſkin was hot, and his pulſe quicker than natural.

17. There was an exacerbation of the head-ach, with heat and thirſt—he was much depreſſed; uneaſy at the ſcrobiculus cordis, and his tongue was ſore and ſtreaked black. * Decoct. acet. rad. ſerp. Virg. cochlear ij. Ut pro Wilkins 28th ægrotationis ſuæ quarta quaque hora dedi atq; vini pauxillum. PM. his pulſe was quick, irregular, and accompanied with tremours; the ſkin was hot, and impreſſed

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* Vid. 28vo. die Wilkins—Caſe III.

a diſagreeable ſenſation on the fingers; and he was ſick at ſtomach.

18. He paſſed the night ill with gripes, ſickneſs and reaching, and he ſweated The bliſter diſcharged freely. There was a remiſſion. Pulv. cort. Peruv. ʒi. tart. emet. gr. ¼ tinc. theb. gut. xv. vin. alb. ʒij. ſecunda quaq; hora dedi. PM. he was much griped and coſtive. Sal. cath. am. ʒſs. cepit, he being averſe to a clyſter. Vini alb. ʒij, ſecunda quaque hora dedi.

19. He paſſed the night indifferently, from the pain of his back. Cort. ut heri tertia quaq; hora ſumat. PM. he had very little ſickneſs at ſtomach, and was in good ſpirits.

20. His tongue was foul, and he was thirſty, when he awoke, and he complained of debility; the bliſtered part pained him. Corticem atque vin. adhuc quarta quaque hora, et anodyn. h. ſ. capiat.

21. He was recovering, but his neck pained him a little. Ut heri præſcripſi.

22. He continued to recover.—Corticem ut ſupra ter in die capiat.

23. He was feeble. Corticem bis in die cepit, et vino, ac diæta idonea utitur.

He continued to recover, though ſlowly, and followed this regimen until the 28th, when he was ſent on duty.

CASE VIII.

Wm. Elliot, a marine, about thirty-two years of age, (a ſtrong man, whoſe birth was contiguous to a perſon ill of a fever) was ſeized on the morning of the 14th of Nov. with chillneſs, head-ach, and lumbago, and afterwards with alternate chills and heats; his pulſe being ſomewhat quicker and harder than natural. Emet. ſtatim ſumat; et h. ſ. ſal. C.C. gr. v. opij gr ß. boli forma præſcripſi, ſuperbib. menth. infuſ.

2. His ſymptoms were a little relieved by a free perſpiration in the night, and two ſmall ſtools; his tongue was white. Sal. cath. amar. ℥i. ſumat. PM. he complained of alternate heats and chills, of univerſal pains, head-ache, and thirſt; his ſkin was hot and dry, and he was much dejected. Veſicator. inter ſcapulas admovi, ac bolum ſudorificum, h. ſ. dedi.

3. He paſſed a reſtleſs night from head-ach, pain over his eyes, lumbago, flying pains, and an urgent thirſt, though he perſpired freely, and the pulſe was moderate, his tongue continued foul. Medicinam quam pro Wilkins ægritudinis ſuæ 28vo. (Caſe III.) præſcripſi, cepit, quarta quaque hora, atque ſp. C.C. xxxv. ſuperbib. potione diluente. PM. he had a very copious ſtool, and was giddy.

4. He

4. He complained of the head-ach, eſpecially about his eyes; of pains in his left ſide and back, of an ill taſte in his mouth, and that his tongue was foul. Sal. cath. ʒvi. hodie capiat. PM .the medicine operated, but a violent exacerbation, particularly of the head-ach, came on; his eyes were ready to ſtart out of his head. Medicin. ut heri, hodie, ſine ſp. C. C. octava quaque hora ſumat.

5. He ſweated, and the head-ach remitted about midnight; his lumbago was troubleſome, and a dyſuria (probably from the bliſter) commenced, and his tongue continued very foul.—Pulv. cort. ʒi. cort. decoct. ℥ij. tart. emet. gr. ¼. ſecunda quaque hora capiat. PM. an exacerbation began at ten this morning, with a violent ſhooting pain of the left ſide; but he now complained leſs of the lumbago and head-ach: his body was lax: bolum ſudor. h. ſ. repetivi.

6. At midnight there was a remiſſion; he ſweated as uſual, and his pulſe continued ſofter; the pain of his ſide affected his bowels at times. Ut heri præſcripſi. PM. the exacerbation began at two PM. during which the head-ach was the moſt ſevere ſymptom, attended with a cough; but the body continued lax. Bolum h. ſ. cepit.

7. There was a remiſſion at midnight: he complained of the back part of his head and neck being painful: the diarrhœa continued

moderate. Medicinas ut heri cepit. At one pm. a paroxyſm came on. Anod. h. ſ. cepit.

8. The remiſſion began as uſual about midnight, with a free perſpiration, but he ſtill complained of his ſide. Ut heri præſcripſi, mane et veſpere. PM. he had a ſlight paroxyſm between four and ſix.

9. At three this morning a ſlight paroxyſm came on, which terminated by perſpiration in the forenoon. Medicinam adhuc ſumpſit mane et veſpere.

10. A paroxyſm returned at three this morning, with pain of the ſide, thirſt, and heat, which went off by perſpiration. Ut heri. PM. he complained of the head-ach. Decoct. ſerp. ſexta quaque hora cepit.

11. He ſweat profuſely at night, and had three ſtools; he now began to recover ſtrength, tho' ſlowly. Corticem atque corticis decoct. bis in die cepit, et anod. h. ſ.

12. He ſweated profuſely, and had a reſtleſs night. Ut heri.

13. He was ſent to ſick quarters, in a promiſing way of recovery; and he, as well as the other patients whoſe caſes have been related, was ſoon reſtored to perfect health.

CASE

CASE IX.

John Audley, aged about 30, a ſtrong man, and irregular at times, was ſeized the evening of the 22d of Dec. 1776, with ſhivering, head-ach, and univerſal pains, particularly in his ſide. Emet. ſtatim, ac eſſent. antim. gut. xxx. tinct. theb. gut. xxx. h. ſ. ſuperbib. mixtn. infuſionem capiat.

2. He perſpired in the night, and was a little eaſier. Sal. catth. amar. i. cryſtal tart. ʒij. dedi. PM. he complained more of the pain of his ſide: veſicator. lateri dolenti admotum, et ſudorific. h. ſ. repetitum.

3. He was relieved of the pain, but his countenance was much diſeaſed. Cort. decoct. ii. tart. emet. gr. ¼. quater in die capit. PM. he complained of a ſevere cough. Anod. dedi h. ſ.

4. At eight laſt night a paroxyſm came on, during which the heat and thirſt were great; the cough was urgent, and reſpiration laborious.—Ut heri, ſecunda quaque hora præſcripſi. At ten AM. there was a remiſſion, and he had no pain in the afternoon.

5. A paroxyſm returned laſt night, but I could not learn at what time. He had a very bad night from inquietude, the cough, pain of his ſide, and dyſpnœa. AM. he wandered, breathed

breathed with much difficulty, looked ghaſtly, and in the afternoon muttered or ſung inarticulately. Jul. cardiaci ʒij. ſecunda quaque hora cepit; et veſicator. lateri renovatum fuit.

At 6 pm. he died.*

SECTION IV.

METHOD OF TREATMENT WITH ANTIMONIALS, CAMPHIRE, BLISTERS, &c.

THE ſame evacutions were now procured, and after the ſame manner as in the bark treatment, except the letting blood, which I had now entirely given up thoughts of, unleſs there ſeemed to be an abſolute neceſſity for it†. The patients enjoyed every other advantage, and in a greater degree than they had done under the bark

* This is the only caſe out of 216 wherein the bark can be ſaid to have failed; and had it been given in ſubſtance, the patient might perhaps have recovered.

† The bark method of treatment preceded this, ſo that none of the patients who were treated in the manner now to be deſcribed were let blood in the beginning of the fever, except Wm James, a marine, one of the firſt who were ſeized with it.

bark method,—as apples, wine, oranges, and limes; of the two laſt of which we got a number out of a prize, as alſo a little wine. The evacuations were as carefully attended to, and either reſtrained when they were exceſſive, or promoted when they were ſuppreſſed, as they had been in the former method, and bliſters were applied as freely. The camphire and tartar emetic were generally preſcribed as in the following mixture.

Mixtura Febrifuga.

℞ Camphor, ʒiß.
Tart. emet. gr: viij.
Sacchari albiſſ. ʒijß.

Bene ſimul triturentur, deinde gradatim ſago† tenuiſſimi uncias triginta adde; atque, ſi viſum ſit, Sal. Nitri pur. ʒijß.—fiat mixtura, à cochleari uno ad tria, vel quatuor, pro doſe:—which was repeated repeated every one, two, three, four, five, ſix, ſeven, or eight hours.

In a few caſes, from twenty to thirty grains of theriac, with three grains of camphire, was adminiſtered every ſix or eight hours, inſtead of the mixture; and in ſome of the caſes the tartar emetic and nitre were given without camphire.

CASE

† This ſuſpended the camphire as well as a ſolution of gum Arabic.

CASE X.

Wm. James, marine, aged about 36, naturally ſlothful, and a tipler, was ſeized, on the 5th of October, 1776, with head-ach, thirſt, pain of the left eye, when he looked at any object, and giddineſs, but he did not complain until the 6th. His pulſe was rather quick and full. Mitte ſang. ℥xii.; et duabus horis elapſis. cath. exhibe. But ſo much blood was not taken from him, on account of his becoming faint.

3. He complained of being weak and faint, which I imputed to his natural indolence. Elix. vit. gut. xx. bis in die ſumat.

4. He had a diarrhœa and was ſtill faint.—Pulv. ipecac. gr. iij. opij gr ß. fiat bolus, quater in hodie ſumendus.

5. His complaints were numerous; he had an ague, he ſaid, in the night, and bilious vomiting in the morning. Tart. emet. gr ß. ſecunda quaque hora capiat.

6. He was ſeized with vomiting, and purging. Ut 4to præſcripſi.

7. He ſtill complained of weakneſs, but from his bad character, and ſo little appearance of diſeaſe about him, I ſuſpected that his illneſs, in a great meaſure, was counterfeit. Tinct. cort. ℥ ß.

℥iß. elix. vit. gut. v. capiat bis in die, and portable ſoup.

8. I was informed that he was delirious in the night; he continued reſtleſs, his pulſe was ſmall and ſlow, and his ſkin rather cold. I ordered him a ſpoonful of a cordial julep frequently, and wine in his ſago; bliſters were applied between his ſhoulders and to his ancles. PM. he perſpired, but wandered at times, and complained of weakneſs.

9. He died this morning.

Few having had the fever before this man, and theſe having been relieved by very ſimple means, I did not think the infection had been received, or that he was in danger, until the 8th, when it was obſerved too late.

CASE XI.

Wm. Hardie, aged about 32, was ſeized the 12th of January, 1777, about noon, with ſhivering, head-ach, and univerſal pains. Emetic. ſtatim cepit.

2. He complained much of debility, giddineſs, and thirſt, and his tongne was foul. PM. his left ear ached, and diſcharged freely. Cath. lene ſumpſit: veſicat. inter ſcapulas admovi.—Towards night he became ſpeechleſs, his face

diſtorted, and he was delirious. Sudor. h. ſ. et opij gr. i. dedi.—About two hours and a half after taking his medicines he became quiet, and ſeemed to ſleep. The delirium returned more violent at midnight; and notwithſtanding the opiate was repeated, he continued delirious, and died at three on the third day; not having been ill 48 hours.

CASE XII.

John Birridge, aged about 40, was ill of ſhivering, head-ach, reaching and vomiting, ſeveral days before he complained (which was on the 19th of Feb. 1777) of being hot and cold alternately, and of great debility. The pulſe was quicker, and the ſkin hotter than natural. Emet. ſtatim dedi.

2. A ſevere pain ſeized the left ſide, and thirſt was urgent in the night, while a frequent cough increaſed the head-ach. Two ſpoonfuls of the febrifuge mixture was preſcribed every two hours. PM. his countenance was wild, he wandered, had tremors at times, complained of great languor, giddineſs, and inceſſant thirſt; his ſtools were watery. Veſicat. inter ſcapulas admovi, et theriac. Androm. gr. xx. camph. gr. iij. boli forma, repet. 8va quaque hora.

3. He

3. He had partial momentary ſweats during the night, but was not relieved by them. Ut poſtrema nocte præſcripſi. PM. the watery ſtools continued, and petechiæ appeared.

4. He reſted ill from wandering and inquietude, the ſkin was hot, the pulſe ſmall, the tongue whitiſh, and he was coſtive. Ut heri. Enema ut viſum ſit injectum. PM. no better.

5. He continued to ramble, his countenance was ſooty, he complained of heavineſs about the heart, and thirſt, though the pulſe was moderate, and his body was open. Ut 2da præſcripſi, ac vini pauxillum dedi. PM. great pain about the ſcrobiculus cordis, from an inceſſant cough, which brought up phlegm only. Veſic. pectori admovi, et anod. h. ſ.

6. He was ſomewhat relieved after a quieter night than the two preceding; the tremors or catchings had left him, and his bliſters pained him; his tongue was white. Medicinas ut heri cepit, et diæta nutriente atq; vino utitur.

7. Laſt night the rambling and inquietude returned; the delirium now increaſed, and he complained of cold. Theriac. Androm. ʒ ß. camph. gr. ij. fiat bol. ſexta quaq; hora ſumend. PM. he became gradually worſe, had a ghaſtly countenance, the pulſe became very feeble, the tongue was brown, there was a rattling in his throat, and he was coſtive. Enema commune fuit injectum.

8. He paſſed a bad night from groaning and inquietude, and he had two ſtools in the night. His pulſe was imperceptible at times; he rolled about his eyes, and turned them up while the delirium continued. Pulv. cort. Peruv. ʒi. tart. emet. gr$\frac{1}{4}$. vin. rub. Oport. ʒiß. m. fiat hauſtus ſecunda quaq; hora præſcripſi —He took this medicine but once, for he died 7 pm.

CASE XIII.

Thomas Baker, a priſoner, who had been in the Weſt-Indies, had been ill, and coſtive five days before he complained; and even then gave a very unſatisfactory account of his illneſs: his head ach had been relieved the day before by an hæmorrhage from the noſe, (viz. March 29, 1779): his countenance was ſallow, and much diſeaſed; he complained of univerſal ſoreneſs and pain about the ſcrobiculus cordis, the pulſe was quick but ſmall, and the tongue was white. Sal. cath. amar. ʒi. cepit ſtatim, (which gave him ſeveral ſtools); poſtea mixt. febrifug. ʒiß. quater in die dedi, atq; potione com.

2. The præcordia were now relieved, but he complained of univerſal pains; the pulſe was more moderate:—Mixtur. febrifug. tertia quaq; hora præſcripſi.

3. Severe

3. Severe head-ach, uneaſineſs, and thirſt haraſſed him, and his pulſe was ſtill quick. Ut heri.—PM. he was greatly dejected, and breathed diſagreeably through his noſe. Theriac. And. gr. xxv. camp. gr. ij. boli forma octava quaq; hora cepit; et veſiccat. inter ſcapulas admovi.

4. He paſſed the night very ill from inquietude and a delirium; his reſpiration was ſtill diſagreeable, and his countenance was ghaſtly. Ut poſtrema nocte, hodie præſcriſi ſexta quaq; hora. At one pm. he died.—I was informed that he had had a fever not long before, on board the ſloop he came from; and that the maſter died on his paſſage from the Weſt-Indies. The man was lifeleſs and diſpirited before I ſaw him;—the thoughts of his being a priſoner might add to his depreſſion, though he was as well treated as our own men.

CASE XIV.

Anthony Gafford, aged about 23, a ſtrong man, and often irregular, was ſeized the 12th of March, 1777, with ſhivering, head-ach, ſickneſs at ſtomach, and univerſal pains, eſpecially of the loins, but did not complaint until the 13th.—Emet. ſtatim, ac ſal. C.C. gr. v. opij. gr ß. h. ſ. in boli forma cepit.

2. He

2. He paſſed a reſtleſs night from coughing; the head-ach continued, his tongue was foul, and his pulſe quick. Sal. cath. amar. ℥i. cepit; et poſtea mixt. febrifug. cochlear. iv. quater in die. PM. he complained of univerſal ſoreneſs.

3. The cough diſturbed him much in the night, but his pulſe and the head-ach were now moderate. Mixtur. ut heri ſumpſit. PM. no alteration.

4. His head was much affected in the night by the cough, and there was an exacerbation of the heat and quickneſs of the pulſe. I ſuſpected he had been irregular. Mixtur. adhuc cepit.

5. He paſſed the night ill from a pain in the left ſide, which was increaſed by his cough; he was very reſtleſs and complained of thirſt; and the teeth were covered with ſordes. Mixtur. ut ſupra, et linct. emol. ad libitum utitur. Veſicat. lateri etiam admoui.

6. Cough, inquietude, and rambling prevented his ſleep; reſpiration became laborious, his tongue was black, and the pulſe was not perceptible. Pulv. cort. Peruv. ʒi. tart. emet. gr^{i}. m. vin. alb. ℥ij. tertia quaq; hora præſcripſi.—One pm. he died.

CASE XV.

Wm. Watkins, aged about 37, was ſeized on the 13th of April, 1777, with a violent head-ach,

ach, ſickneſs at ſtomach, and lumbago; he told me he was ſubject to fits. Emetic. ſtatim cepit, et ſudorific. h. ſ.

2. He was not relieved, and the pain was chiefly in the back part of his head. Sal. cath. ℥i. hodie cepit, ac ſudorific, h. ſ.

3. The head-ach ſtill continued. Veſicator. inter ſcap. admov. et mixtur. febrifug. quater in die cepit.

4. He was very hoarſe, and had an urgent cough. Ut heri præſcripſi.

5. No alteration for the better, and his pulſe was full. Mitte ſang. ℥viii. detrahere ſit; et exhibe mixtur. ut heri, ac anodyn. h. ſ.

6. He complained of griping, and a ſwelling of the abdomen, diſturbing him in the night.—Sal. cath. am. ℥i. mane; deinde mixtur. ut antea. PM. he had no complaint, but his countenance was wild, and his pulſe quick. Camp. gr. iv. opij gr ß. dedi.

7. He began to rave, and became very reſtleſs at midnight; the delirium continued thro' the day and he looked at his fingers. Mixtur. adhuc cepit. PM. effuſion of tears: camphor. bol. atque op. h. ſ. cepit; ac veſicatoria brachijs iuternis admota fuerent.

8. The delirium was leſs, and he paſſed the night more quietly, but his countenance was diſeaſed, his reſpiration ſhort, and the pulſe was ſmall. Theriac. And. gr. xx. camphor. gr. iij.

ſexta

ſexta quaq; hori præſcripſi. PM. no alteration, only the cough was more urgent: ut 6ta h. ſ. præſcripſi.

9. He paſſed a reſtleſs night from an increaſed delirium; the countenance was ghaſtly, and his tongue browniſh. Ut heri: veſicat. talis internis etiam admovi. PM. he was comatoſe and delirious alternately.—Had involuntary ſtools for ſome days.

10. The bliſters were neglected to be applied yeſterday; the pulſe was not perceptible, his teeth were covered with ſordes, and his tongue was black. Ut heri præſcripſi.

11. He was quieter, and rational at times; but he was quite languid, and his pulſe ſcarce perceptible. Ut heri medicinas cepit. At 7 pm. he died.

CASE XVI.

Stephen Hutchins, about 38 years of age, on tne 19th of Dec. 1777, was ſeized with ſhivering, a bad taſte in his mouth, head-ach, lumbago, and pain, with a ſenſation of ſwelling about the epigaſtric region, but he did not complain until the 20th. Emet. ſtatim cepit. The emetic operated both ways.—Tart. emet. et opij ana grß. h. ſ. dedi.

2. His head-ach and pain in the back were relieved by perſpiration in the night; but he was now

now haraſſed with an urgent cough, and a ſoreneſs at his ſtomach. Mixtur. febrifug. ter in die; linct. emol. ſubinde, ac ſudorific. ut poſtrema nocte præſcripſi.

3. He paſſed the night ill from inquietude; and the cough, head-ach and lumbago diſtreſſed him at times; he was chilly and hot alternately, the tongue was red in the middle, and thirſt was troubleſome. Mixtur. quater hodie cepit, ac anodyn. h. ſ. About two in the afternoon he had a ſlight remiſſion.

4. About ten laſt night the exacerbation returned; a tinnitus aurium, ſoreneſs, and entire deafneſs of the left ear, which had been a little painful for two days; the pulſe was ſlower than natural, and the countenance ſallow and diſeaſed. Mixtur. adhuc cepit, et anod. h. ſ. tuſſe urgent.

5. He complained moſt of his ear and deafneſs. Ut heri præſcripſi.

6. An exacerbation came on about ten laſt night, with great pain at the ſcrobiculus cordis, which went quite round the thorax; he had a teaſing cough, an unnatural reſpiration, and was much depreſſed. Ut heri, et tinct. ſerp. Virg. ʒi. 11 am. et 4 pm. dedi; veſicat. etiam dextro epigaſtrio admovi.

7. At 8 am. an excruciating pain ſeized the right ſide after he had paſſed a very reſtleſs night:—opij gr. i. deglutivit, ac volatili linimento linivit:—mixtur. tertia quaq; hora præ-

ſcripſi. Enema ut viſum, et opij gr. i. Et ſanguinis ℥iv. mitte. PM. no remiſſion of the pain, the part was ſwelled and tenſe, the breathing laborious, the alæ of the noſe were diſtended, the face was fluſhed, and covered with ſweat, and the pulſe was ſmall.

8. After the third clyſter he had a ſmall diſcharge, with great flatulencies, which relieved him, and ſoon after he had ſeveral white frothy ſtools: however, he paſſed an indifferent night, neither the pain, hardneſs, nor ſwelling being carried off: his throat rattled in his ſleep; am. he was faintiſh when taken out of bed, but he grew better, and held out very well to ſick quarters, where he afterwards died, as I was informed.

CHAP.

CHAP. III.

TABLE I.

Points out the ſuperiority of the Bark, over all other methods of managing the Fever on board the Juno.

Under the Bark Method.		Under all the other Methods.	
Were treated on Board.	Died on Board.	Were treated on Board.	Died on Board.
216	1	296	6

TABLE

TABLE II.

Points out the ſucceſs of the methods of treating the Fever at New-York and Rhode-Iſland Hoſpitals.

To New-York Hoſpital, and treated with camphire, &c.		To Rhode-Iſland hoſpital, and treated with antimonials, &c.	
Were ſent of fev. patients	Died	Were ſent of fev. patients	Died
36	5	24	4
15 of whom were convaleſcents.	4 of whom were convaleſcents.	1 of them went from a prize, & I did not ſee him.	1 was ſent from a prize, and I did not ſee him.

TABLE

TABLE III.

Shows the proportion of deaths under the different methods of managing the Fever.

Fever patients treated with Bark.	Fever patients treated in all the other methods on board the Juno, at New York, and Rhode-Iſland hoſpitals.
216 *	296
One died.	15 died—near 1 in 19.

* A number of patients took bark and recovered, after the time of my general method of treatment with the bark expired, who are not here included, but are claſſed with thoſe under the other methods of treatment.

TABLE IV.

DISEASES *on Board His Majesty's Ship* JUNO, *From* AUGUST, *to* DECEMBER, 1776.

DISEASES.	August.	Sept.	October.	Novemb.	Decemb.
Fever	34	15	20	23	10
Dyſentery		15	1	2	
Belly-ach	1			1	1
Coſtiveneſs	1	1	1		
Diarrhœa			1		
Pain of the Stom.					1
Reaching		2			
Scurvy	89	5	2	1	5
Rheumatiſm		2	4	2	4
Gout		1			
Head-ach		1	1		5
Cough		5	1	2	3
Sore Throat		2		1	5
Hemorrhage					1
Deafneſs				1	2
Ear-ach			1		1
Epilepſy	1	4			
Ophthalmia			1		
Blindneſs			1		
Nephritis				1	
Diabetes			1		

TABLE IV. CONTINUED.

Diseases.	Aug.	Sept.	Oct.	Nov.	Dec.
Eruption		1		3	
Impetigo			1		
Itch		1			1
Scald	1		1		
Contuſion	11	8	9	10	3
Strain	1	3	1	1	2
Rupture		1			
Fracture			1		
Excoriation	1	1		1	
Wound	3	1	1		1
Inflammation	2		2	1	3
Furuncle			1		
Abſceſs	1				1
Ulcer	4	3	2		1
Accidents					1
Drowned		1			
No. of Patients	150	73	54	50	51
No. of Deaths		2			1
No. of Patients ſent to Hoſpitals or ſick Tent.	27	24	11		

TABLE

TABLE V.

Diseases *on Board His Majesty's Ship* Juno, *From* January *to* May, 1777.

Diseases.	Jan.	Feb.	March.	April.	May.
Fever	21	13	41	14	8
Peripneumony			1		
Erysipelas		1			
Dysentery		2			
Belly-ach	2		2	1	1
Diarrhæa	1				
Pain of the Stom.			1		1
Scurvy	2	1		1	1
Rheumatism	1	2	3	3	5
Head-ach	1		1	3	1
Cough	6	13	17	1	
Sore Throat	5	2	8	4	
Hæmoptoe					2
Consumption			1		1
Deafness					1
Ear-ach	1			7	1
Epilepsy	1				
Nephritis	1				
Diabetes	1				
Suppres. of Urine		1			
Hemorrhoides					1

TABLE V. CONTINUED.

Diseases.	Jan.	Feb.	March.	April.	May.
Eruption	1	1	2	1	1
Scald		2	2	4	1
Contuſion	11	10	7	8	3
Strain	5	1	3	1	2
Rupture			1		1
Diſlocation		1		1	
Fracture			2		1
Excoriation	1				1
Wound		3	2	4	
Inflammation	2	3	6	4	3
Abſceſs		1	4	1	
Ulcer	3	6	9	10	2
Drowned	1				
Number of Patients	67	64	113	68	38
Number of Deaths	2		2		1
No. of Patients ſent to Hoſpitals	7	5	8		

TABLE VI.

Shewing the Event of the particular Diſeaſes.

Diseases.	Number.	Number ſent to Hoſpitals.	Deaths on Board.
Fever	199	7	3
Peripneumony	1		
Erysipelas	1		
Dyſentery	21		
Belly-ach	9		
Coſtiveneſs	3		
Diarrhœa	2	1	
Pain of the Stom.	3		
Reaching	2		
Scurvy	107	38	
Rheumatiſm	26	8	
Gout	1		
Head-ach	12		
Cough	48	9	
Sore Throat	27		
Hemorrhagia	1		
Hæmoptoe	2		
Conſumption	2	1	1
Giddineſs			
Deafneſs	4		
Ear-ach	11		
Epilepſy	6	3	
Ophthalmia	1		
Blindneſs	1		
Nephritis	2		

TABLE VI. CONTINUED.

Diseases.	Number.	Number sent to Hospitals.	Deaths on Board.
Diabetes	2	2	
Suppref. of Urine	1		
Hemorrhoides	1		
Eruptions	10		
Impetigo	1		
Itch	2		
Scald	11		
Contuſion	80	4	
Strain	20		
Rupture	3	1	
Diſlocation	2		
Fracture	4	1	
Excoriation	5		
Wound	15		
Inflammation	26		
Furuncle	1		
Abſceſs	8		
Ulcer	40	7	
Accidents	1		1
Drowned	2		2
Whole Number	728	82	7

TABLE III.

Shews the Number of Fever Patients for Ten Months, and the Proportion of Deaths.

Number of Fever Patients for Ten Months; beſides Patients with Rheumatiſm, Cough, ſore Throat, and Ear-ach, which were all accompanied with Fevers, & amount to 112	Died on Board.
199	3
Proportion of Deaths	One in $66\frac{1}{3}$.

Of the three who died of the fever, two were in a deſperate ſtate before they applied for aſſiſtance; and the other met with an accident while he was ill, ſo that the bark in neither caſe had fair play.

Of the fever patients ſent to the hoſpital, one was in a convaleſcent ſtate, and another was ſent the day after he came from a tender. With ſcurvy, 27 of the 38 were ſent to the tent for the benefit of air and milk. Some were ſent thrice for this complaint.

O B-

OBSERVATIONS, &c.

PART II.

INTRODUCTION.

TO aſcertain the efficacy of the Bark in curing the ſhip fever,—when his Majeſty's ſhip the Edgar was put into commiſſion, on the 25th of May, 1779, (regardleſs of the expence which I knew muſt attend the experiments, tho' I could ill afford it) I provided myſelf then, and from time to time ſince, with bark for that purpoſe; and finding it, in a very extenſive practice during this period, ſucceed to my expectation, I can with pleaſure recommend it as a cure for *this fever*, as well as for the *tertian* of hot climates. The following pages therefore, as they contain an epitome of our management of the fever, from the above date, to the 31ſt of July, 1780, 'tis hoped will not be unacceptable to the reader.

In ſupport of this fact, I could inſert hundreds of caſes in which we have adminiſtered bark, and the

the names of ſeveral young gentlemen of the profeſſion, who have been witneſſes of our management of the fever, beſides the names of other gentlemen, who by our recommendation have experienced, in their own practice, its happy effects; but as doing this might appear oſtentatious, if not tireſome to the reader, we ſhall only relate a few caſes to illuſtrate the ſubject, and ſeldom mention other practitioners. As the laſt argument on the ſubject, we have ſubjoined a few tables, on the ſame plan as thoſe which are annexed to the preceding obſervations.

By the poſitive evidence which may, we preſume, be fairly collected from our Phyſical Journal, and the former part of this work, but more particularly from the cleareſt negative evidence in the following ſheets, 'tis hoped we have ſatisfactorily proved our aſſertion at the end of the Introduction to the Obſervations, intimating the fatal effects of delaying ſo long to give bark in the fever.

The reader is not to expect another deſcription of the fever; a more faithful one than the preceding we cannot preſent him with.—'Tis true we could arrange them in a different manner, but we could not render them more diſtinct. A few ſymptoms, however, which occurred on board of the Edgar, that did not appear, at leaſt were not obſerved on board of the Juno, are inſerted diurnally, previous to the relation of the management of the fever.

It

It will ſeem paradoxical to mention that bark is a cure for the ſhip-fever, and afterwards to allow that patients died of this fever, where bark was adminiſtered. When I ſpoke of bark as a cure for the ſhip fever, I meant, comparatively to what other medicines I have hitherto known to be uſed for that purpoſe. A never-failing remedy for any diſeaſe, is, I believe, unknown to mankind; if any ſuch there is, miſconduct too often renders it ineffectual. Thinking it therefore of more importance for the inſtruction of young practitioners, to lay before them a few caſes at length, which terminated fatally, than to preſent them with the hundreds which yielded to the bark, we have in the ſequel, as in the former obſervations, related thoſe particularly; truſting that our candour will meet with benevolence from thoſe who may think we have erred in our practice.

That it may be ſeen wherein we differ in our management of the ſhip fever from many eminent phyſicians, we ſhall conciſely lay their theory and their method of treating it before the reader. But it will be proper firſt to inform him briefly how the Edgar was manned, and by what means the infection was brought on board, and continued active ſo long.

CHAP.

CHAP. I.

How the EDGAR *was manned, and by what Means the Infection was brought on Board, and kept active ſo long.*

THE Edgar was built at Woolwich, and lauched June 30th, 1779; and if credit can be given to reports, about 2000 men entered for her in different parts. Certain it is, however, that the marines excepted, which came partly from all the three diviſions, moſt of her men entered for her in, and came from Scotland. Men entering there have the ſame conveyance to their reſpective ſhips, as if they were impreſſed. They are ſhipped and crouded on board of tenders; and after, perhaps, a very long paſſage to the Nore or the Downs, they are put on board of the guardſhips, which are often very much crouded, and there they remain until their ſhips are ready to receive them, when they are carried to them by other tenders. Whether that happens in a long or a ſhort time, will depend on circumſtances.

On board of the tenders they lie in bulk, and on board of the guardſhips many lie on cheſts and

and the decks, and often without beds. It is not in the nature of things that men labouring under thoſe diſadvantages, and coming through ſuch a channel of infection, as tenders and guardſhips unavoidably muſt be, while they continue on the preſent eſtabliſhment, can eſcape being either infected themſelves, or bringing it in their cloaths and bags to their reſpective ſhips.

The Edgar being manned in this manner, the ſhip fever made its appearance immediately, and ſoon after increaſed with violence in ſpite of the precautions that were taken to prevent it, until the month of December, when it abated, and decreaſed gradually to the 16th of January, the day of the action with the Spaniſh fleet, and ſtill more perceptibly for ſome time after, though we were crouded with the priſoners until the 23d of Feb. During that time, ſome of the priſoners were ſeized with the fever, but I could not learn whether their own ſquadron had been ſickly or not. Soon after the ſhip was haled into the New Mole of Gibraltar, where ſhe lay above three weeks. The people had liberty to go aſhore, and, as uſual with them, many got drunk as often as they went. About this time all the Britiſh ſeamen, who had been in Spaniſh jails, were releaſed by cartel, and ſent on board of us, of whom ſome were very ill of the ſhip fever.—The declining infection was now rouſed into

new life; but a little before we left Gibraltar (on the 20th of April) it began to decline, and continued doing ſo on our paſſage to England, where we arrived on the 13th of May. Here, from the men's intemperance, after having been five months without freſh proviſions or vegetables,—and by having men ſent on board of us from the guardſhip, (the Arrogant) as alſo from the Princeſſa and Prince William, on board of which the fever was—the infection became far more virulent than ever; and continued ſo until it was providentially checked by repeated ſmoakings with tobacco in the months of July and Auguſt; for which I readily obtained leave from Capt. Elliott, to whom I wrote the following letter on that occaſion.

Edgar at Sea, July 6, 1780.

SIR,

THE infection which has exiſted on board of His Majeſty's ſhip, under your command, ever ſince ſhe was manned, having of late become ſo virulent as to reſiſt the methods that were ſucceſsfully uſed formerly to check it,—I beg leave to acquaint you, that it will be highly neceſſary to have recourſe to other means for that purpoſe; and to inform you that the moſt effectual which I have ever experienced in a ſimilar caſe, are, to ſmoak the ſhip frequently with tobacco. The tobacco ought to be well wet with vinegar, and laid on fires placed in tubs, having water

water and ſhot under them; and theſe ought to be ſo ſmall as barely to light the tobacco, that it may ſmother away. Seven fires will be requiſite for one ſmoaking, and two pounds of tobacco at leaſt for each fire. All the ports ſhould be barred in, and the hatchways covered with tarpawlings, when the fires are lighted; and the ſmoak ſhould be thus confined for three hours at leaſt.

I am, Sir,
Your moſt obedient, humble Servant,
R. ROBERTSON.

Capt. Elliot, Commander of
His Majeſty's Ship Edgar.

To which Capt. Elliot returned the following Anſwer.

Edgar at Sea, July 6, 1780.

SIR,

I HAVE received your letter of this date, and have given directions to the purſer of His Majeſty's ſhip under my command, to ſupply ſuch quantities of tobacco as you may, from time to time, think it neceſſary to demand for the purpoſe of ſmoaking the ſaid ſhip, to check the progreſs of the infection therein, agreeable to your recommendation.

I am, Sir,
Your moſt humble ſervant,
J. ELLIOT.

Mr. Robertſon, Surgeon, Edgar.

The happy effects of this management were thus reported to Captain Elliot:

Edgar at Sea, Auguſt 17, 1780.

SIR,

ON the 6th of July laſt, when I repreſented to you that the infection was become ſo virulent as to render it neceſſary to have recourſe to other means than had formerly been uſed,—ſucceſsfully to check it,—the number of fever patients on the ſick liſt was fifteen; and for ſome days before was increaſing by two or more daily. Since that period the ſhip has been ſmoaked five times with tobacco, after the manner I propoſed; only mixing ſulphur with the vinegar, to prevent the tobacco from being embezzled; which purpoſe it fully anſwered.

I have the pleaſure to acquaint you, that the number of fever patients is now reduced to four; and that for the laſt twelve days only four fever patients have complained.

Should you approve of it, I am of opinion, were this matter repreſented to the Lords Commiſſioners of the Admiralty, it might be productive of future benefit to the ſervice.

I am, Sir,

Your moſt obedient humble ſervant,

R. ROBERTSON.

Capt. Elliot, Commander of
His Majeſty's Ship Edgar.

Greater

Greater diligence could not be exerted to get the ſhip healthy, and to keep her ſo, than was by Capt. Elliot, and the firſt Lieutenant, whoſe duty it was to execute the Captain's orders. Every thing which I propoſed for that purpoſe being readily adopted.—It is doing Capt. Elliot no more than juſtice to declare, that his liberality to the ſick exceeds what I have met with in the ſervice.

CHAP. II.

THEORETIC DOCTRINE AND TREAMMENT OF FEVERS.

"A Fever, ſay phyſicians of great eminence, being an effort of nature to throw off ſomething noxious to the conſtitution, we are not to impede her operations by either checking or aſſiſting her raſhly." This is the poſition which they lay down for the general method of treating fevers; but how little they adhere to it in practice, is obvious from reading their works. Through theſe we find theory urging the moſt cogent reaſons for letting blood, once at leaſt, which is all that they preſcribe the firſt day.—Theory we again ſee pointing out powerful arguments to promote vomiting, purging, and ſweating, in ſucceſſion, which employ ſeveral days

days. Now we obſerve theory rendering it, to them, abſolutely neceſſary to keep up a moderate perſpiration; and the inteſtinal coat in a lax ſtate: for which purpoſe, antimonials, camphire, or both, are generally preſcribed. But notwithſtanding theſe, and their calling in at laſt the aid of bliſters, cordials, and bark, the ſtrength of the patients having been exhauſted early in the fever, many are loſt, and the fault too often imputed to the bark. Numberleſs quotations might be adduced to prove what we have ſaid; and I appeal to the reader, how far the practice of thoſe phyſicians coincides with their poſition. If they believe the former, why contradict it by the latter? Can any man, in the higheſt health, and ever ſo athletic, endure ſuch a ſeries of debilitating evacuations, without the operations of nature being affected?—Laying the circumſtance of diet, which is of great importance in ſupporting the ſtrength, entirely aſide.

The field for theoretic argument is boundleſs; but it being foreign to our purpoſe, we leave it to thoſe who have more leiſure and inclination to enter it ſcientifically. Be it our taſk to adhere to experience, to ſtate clearly what it teaches, and thus aſſiſt the unexperienced of the profeſſion to manage the ſhip fever more ſucceſsfully than it has been hitherto on board of his Majeſty's fleet. To accompliſh this, or in other words, to lay a foundation for reducing the management

nagement of the ſhip fever, as well as the tertian or remittent fever, of hot climates, to a ſyſtem, has been our ſtudy for many years. Having repeatedly avowed, however, that we pretend not to dictate to the learned and experinced practitioners; inſtead of their cenſure, we hope for approbation for the unprofitable taſk.

CHAP. III.

Symptoms of the FEVER, *that occurred on Board of the* EDGAR,, *which were not obſerved on Board of the* JUNO.

ON the firſt day ſome patients complained of the following ſymptoms:—Heavineſs and a ſlight lethargic diſpoſition; a degree of hardneſs and ſwelling, with pain of the right groin; an inflammation or ſoreneſs of the throat, and an exudation of pus on the tonſils; accompanied with a fetid ſmell, a very offenſive breath, and an eruption reſembling meaſles.

3. An angry eruption about the mouth; and the patient, when aſked to ſhew his tongue, took hold of it with one hand to pull it out of his mouth downwards. This was the caſe of a relapſed patient.

4. Hiccough in ſome caſes, which terminated favourably, and in one which ended fatally with a convulſive catching; difficult expectoration of a bloody and extremely viſcid phlegm.

6. Profuſe

6. Profuſe hemorrhagia from the noſe.

7. The laſt ſymptom mentioned the third day, coſtiveneſs, with yellowneſs of the tunicæ albugineæ oculorum.

8. A perpetual dryneſs of the mouth, and a yellow ſuffuſion over the body and eyes.

9. The ſick ſwallowed what was expectorated by cough; a rattling in the throat was perceived, which was followed by death on the 13th.

10. The laſt ſymptom mentioned on the third day.

13. The patient provoked a tendency to reach by putting the fingers of the left hand into the mouth as far as he could, and pulling his tongue when no perſon was in ſight; afterwards he picked his teeth. He died the ſame night.

14. The eyes appeared yellower ſometimes than they did at others; the cuticula ſeparated and pealed off; paralyſis, and an uncommonly large and healthy-like ſtool.—This patient died.

16. Rigidity of the limbs.

19. A vomiting of watery ſtuff only, though other things were in the ſtomach.

20. An extremely viſcid and bloody phlegm was expectorated.

It is remarkable that virulent as this infection was, no petechiæ ever appeared on any of the patients:—Query, Could this be owning to any other cauſe than the bark having been liberally adminiſtered?

CHAP. IV.

Of the Management of the SHIP FEVER.

HOW far the preceding poſition laid down by many eminent Phyſicians is juſt and applicable to Fevers in general, is not our buſineſs to enquire, much leſs to determine; but we have learned by experience, that it is not applicable to the Ship Fever, which apparently is "The effect of poiſon in the conſtitution, whence imminent danger or death muſt follow, unleſs it be either ſpeedily ſubdued or expelled;" and therefore, that the moſt expeditious method to accompliſh either is the fitteſt. The method which we have found beſt adapted to the purpoſe, we now proceed to ſhow.

1ſt. *Of Blood-letting.*—In our obſervations, we took notice that the climate, and other circumſtances under which we then practiſed, induced us to think it proper to let blood in a number of caſes, eſpecially when the patients firſt complained; but by daily obſervations, and a careful review of the diary, it appeared, that it never was productive of good—on the contrary, of miſchief often: and having never found in a more extenſive practice, that one patient has ſuffered by omitting that evacuation, (for I

have never let blood of a patient ill of the ſhip fever on board of the Edgar) I can aſſure the young practitioner, that in a hundred caſes it will not be neceſſary to let blood. I will not aver that a caſe cannot occur wherein it may be proper; but we have not met with ſuch a one among ſeveral hundreds, and I therefore caution young practitioners againſt Blood-letting.

A friend of mine, who is ſurgeon of a ſeventy-four gun ſhip, in a converſation on this ſubject, told me, that it was his practice to let blood of his patients, and that it ſeemed to relieve greatly; eſpecially when they had fixed pains about the thorax. I adviſed him to omit bleeding ſome of his patients in future, and treat them with bark; and to obſerve whether they did not recover ſooner than thoſe from whom he took away blood, and treated in other reſpects, as his other patients. The next time we met, he told me that he had followed my advice, and found that the patients whom he bled became much weaker, and were recovered with greater difficulty than thoſe who were not bled. This is a pointed teſtimony of an unwilling evidence againſt a favourite evacuation of his own, and of too many more.

2d. *Of Emeticks.*—We mentioned in the obſervations, that, if emetics are adminiſtered when the firſt ſymptoms of contagion are perceived; or

or during the cold, or ſhivering fit of the firſt paroxyſm, they frequently become a preventive of the fever, as Dr. Lind has likewiſe obſerved: but otherwiſe, we have rarely found them of further benefit, than as a preparative for the bark;—and however early in the diſeaſe the patient took it, I preſcribed a ſudorific at bed-time. Indeed the emetick frequently procures ſeveral ſtools, and ſweats, but theſe ſeldom are critical, unleſs at the times already mentioned.

After what is ſaid, we hope it is unneceſſary to enjoin young practitioners to vomit their patients as ſoon after they complain as poſſible; and immediately after to give a gentle ſodorific, expoſing the patient as little as poſſible, that the perſpiration, if they have dependance upon it, may be kept up as long as they judge proper. But ſhould the patient have been ill ſeveral days before he complained, it will be, generally ſpeaking, a loſs of time to promote ſweating, and idle to expect relief either from vomits or ſudorifics.

The emetics which I preſcribe are either the pulv. rad. ipicacuan. or tart. emet. in the manner I have mentioned in the obſervations. I would earneſtly recommend it to young gentlemen of the profeſſion to adminiſter the tartar emetic in ſmall doſes, every half hour, until it operates; leſt they otherwiſe do their patients

much hurt inſtead of good. Great is the miſchief which has been occaſioned by giving from three to ſix grains at once—univerſal ſpaſms, and extreme debility, which have proved the means of death.

If the emetic is given before noon, the remainder of the day muſt not be loſt. Unleſs the patient has had a copious ſtool or two, I order a gentle cathartic to be given two hours after the vomiting is finiſhed: the cathartic which I generally order is the ſal. cathart. amar. ℥i. with, or without, cremor. tart. ℥ij.—To ſave time, in many bad caſes, I have given the tart. emet. and ſal. cath. am. together, in ſmall quantities, repeating them until a ſtool was procured; and then ordered the bark.

3d.—At bed-time I would adviſe a ſudorific to be adminiſtered, and the limbs to be waſhed with warm water, and a little vinegar. Sudorifics are very numerous; but what I have preſcribed on board of the Edgar, is either of the two following—Tart. emet. gr.ſs. vel gr. i opij. gr. ſs. conſ. roſ. fiat bolus.—Vel ſal. C. C. gr. v. opij. gr ß. con. roſ. fiat bolus; hora ſomni ſumendus; ſuperbibend. potione diluente, tepida, ad libitum.

Should the patient have been ill ſome days before he complained, and the head ach violent, it will be the more neceſſary to apply a

bliſter

bliſter between the ſhoulders at this time.—If it was evening before the patient complained, I only thought fit to give the emetic and ſudorific, and to bathe the limbs.

4th.—The next, or ſecond day of the patient's complaining, I ordered him the cathartic, unleſs the emetic had procured ſome ſtools; and unleſs bark was preſcribed together with the cathartic, which was often done, I began to give it as ſoon as the patient had one or two looſe ſtools, and afterwards it was continued from every one, to every four hours, as I ſaw occaſion. The ſudorific was, often, again repeated at bed-time, and the bliſter applied as already mentioned, when the head-ach was violent.

5th.—I have remarked in the obſervations, that unleſs bliſters are applied very early in the Ship Fever, I could hardly ſay they ever proved beneficial, except in caſes with fixed pains about the thorax, which they often removed without abating the fever. I am ſo well confirmed in the juſtneſs of the remark by longer experience, that I recommend it to young practitioners to apply bliſters early in the ſhip fever, without regarding any theory on the action of cantharides and bliſtering in the beginning of the fever—if they wiſh to apply them with good effect. I therefore again repeat it, with Dr. Lind, that when applied early, they often carry off the fever entirely: but I muſt add, though contrary

trary to that eminent phyſician's opinion, that I never perceived good effects from them, or the diſcharge which they procured, in the advanced ſtate of the fever, except in the caſes before mentioned.

6th. *Of Bark.*—In ſome caſes, I preſcribed it as ſoon as the patient complained, without waiting for any evacuation whatever;—in others, a few hours after they were vomited only; and often along with the cathartic, according to the exigency of the caſes. The more dangerous and alarming they are, the more neceſſary it is,—experience has convinced me to adminiſter bark early.

However, generally ſpeaking, the ſick began to take it a few hours after the cathartic had operated; and in ſome favourable caſes, it was the third day before they took it: but it ought to be known, that if the patient did not complain until the evening, I reckon that as one day. At whatever time I preſcribed it, the patients continued it; a drachm, a drachm and a half, or two drachms for a doſe, from every hour, to every four hours, as ſeemed proper—diminiſhing the number of doſes as they recovered, until they were cured. Two ounces of bark was mixed at once with a quart of water;* two, three,

* See our reaſons in the Phyſical Journal, p. 144.

three, or four ounces of which were a doſe, according to the quantity deemed neceſſary.

Though this was the ſimple manner in which I generally adminiſtered bark, yet, as in many caſes we joined other medicines along with it; and as our chief dependance for the cure is on it, we ſhall be more particular on this head, and at the ſame time endeavour to combat the principal objections which theory furniſhes againſt the early uſe of bark in fevers; thoſe are the ſuppoſed *tonic*, *phlogiſtic*, and *conſtipating* qualities of this medicine; which, if I miſtake not, may be expreſſed in the word *mechanical*. I wiſh to know however, of phyſicians who attribute thoſe qualities to bark, whether by fair and candid experience they have found it to poſſeſs them; or whether it be their own opinion, or that of others, grounded on theory only, that it does poſſeſs them?—If they anſwer the latter query, affirmatively, I would further know, what are the qualities of bark in their opinion which cure intermittents, large foul ſores, bad-conditioned ſtumps, gangrene, mortification, and other diſeaſes, and which prevents fever and infection?

Patients labouring under intermittents, as they, comparatively ſpeaking, are in a higher ſtate of health than ſhip fever patients, who very often are ſeized with the greateſt proſtration of ſtrength and ſpirits—ought they not, according to the doctrine of thoſe gentlemen, to be more

more improper objects for the *tonic*, *phlogiſtic*, and *conſtipating* bark than the latter, after the prime vie are emptied?—In what manner, I ſay, does it act on the man in perfect health, who takes it as a preventive of contagion, and in the other caſes mentioned? Does it exert different qualities in the various diſeaſes for which it is preſcribed, as the beſt remedy yet known? Or, in a word, which, I believe, comprehends the truth, are not the qualities and properties of bark by which it cures ſo many diſeaſes, entirely unknown to us? This being the reſult of the argument, let us not be ſo anxious, or employ our time ſo idly, as to ſtudy to attain knowledge beyond our reach—to comprehend the eſſential properties of one of the beſt medicines—if not the very beſt—with which Providence has bleſt us; and far leſs to raiſe objections againſt it, becauſe we know not the manner of its acting on the conſtitution—objections which common ſenſe can overthrow, and daily experience confutes. From my own experience, I have not a doubt but that where one patient has died of the ſhip fever from bark being preſcribed too early and liberally, thouſands have died in the world from a contrary practice. The danger which theoriſts threaten us with from an early and liberal uſe of bark in this fever, ſtrikes me with the ſame idea, as if they were to tell me that I would

poſſibly

poſſibly fall, if I attempted to run out of a houſe which I knew was on fire, and contained a quantity of gunpowder ſufficient to deſtroy the fabrick and its inhabitants.

That we may view this important ſubject, however, in another light, we will ſuppoſe bark really to poſſeſs the qualities of *tonic*, *phlogiſtic*, and *conſtipating*; and for this purpoſe, we will ſtate a caſe as favourable to their theory as they can wiſh. "The patient, who has been already gently vomited, purged, and perhaps ſweated and bliſtered, is not relieved of any of the ſymptoms, which, though not violent, will aſſuredly become fatal if the fever is not ſubdued." The queſtion then is, what method is the moſt eligible to ſubdue it?—I ſay, bark is by far the beſt febriſage known. But then you reply, it poſſeſſes ſuch qualities as to render it very improper for your patient.—I know all its qualities as well as you do, and experience has taught me what it will effect. Let me know what are the ſymptoms your patient has—Various pains, eſpecially head-ach, thirſt and anxiety, the ſkin is dry and hot, the pulſe quicker and fuller than natural, and the tongue parched; and you add, that the ſymptoms induce you to think, that inſtead of bark, it would be proper to give him antimonials, camphire, nitre, and ſubacid and diluting drinks, to promote diaphoreſis and moderate the fever. I anſwer,

that I know from experience, it is very doubtful whether they effect this or not, and ſtill a greater doubt if they will cure the patient; I know the odds are fifteen to one that they will not ſo certainly as bark: therefore, whatever elſe you like to give your patient, I adviſe you to give bark as the baſis of your preſcription.—You afterwards tell me, you have tried your patient with bark repeatedly, that his ſtomach will not retain it, and that he is not relieved:—I would have you then join either opiates, tinct. cort. wine, or ſp. C.C. with it; and to leave them off, or to continue either of them as you ſee proper, even after the ſtomach retains the bark. You next inform me, that your patient has remiſſions, but that he has had only one ſtool, ſince he began with the bark; or that he has had a diarrhœa ever ſince.—Add, in the former caſe, a ſmall quantity of any mild purgative from time to time, with the bark, or throw up a clyſter as often as you think proper; and, in the latter, join opiates with it. Again, you inform me, that your patient is greatly relieved, but ſtill has diſagreeable exacerbations of heat, the ſkin dry and hot, and the pulſe quick, and you wiſh to promote a perſpiration—I aſk you then, cannot you add ſal. amon. crud. ſal ſuccin. ſal. C. C. tart. emet. or camphor, to the bark, as you pleaſe? reminding you at the ſame time, that profuſe perſpiration muſt neither be promoted nor encouraged.

couraged. Laſt of all you tell me, that your patient is quite feeble, has exacerbations towards evening, and is reſtleſs through the night.—You are then to order him wine either with his bark, or otherwiſe, as you think proper; but to pay attention to his diet, and to give him an anodyne regularly every night till he recovers—which you tell me has happened, the next time we meet; but you cannot help adding, that I have preſcribed for the patient in a very different manner to what the greater part of phyſicians recommend in ſuch caſes; and aſking, how can you deviate ſo widely from the general practice?—To this I anſwer, that I only deviate from the general practice, becauſe it fails fifteen times where bark fails once*. In a pretty large hoſpital, I have ſeen one in ten die under the general practice. I know, ſay you, that you are now alluding to the ſhip fever; but would you preſcribe bark in all other ſpecies of fevers?—I anſwer, I know not how many ſpecies of fever you reckon; but I would preſcribe it in every caſe that did not proceed from local inflammation. What! in the ſmall pox and meaſles?—Certainly, I would tell you, if they unfortunately broke out on board of a ſhip, or in any place where the ſhip fever was: I have done it in the meaſles ſucceſsfully, and I can ſee no reaſon why I ought not to do it in the ſmall

* See Table VII. in our obſervations.

pox, ſhould they happen where the ſhip fever is; and as early as in any other caſe of the fever. To preſcribe bark in the ſecondary fever of the ſmall pox is common among phyſicians. I grant that, you ſay, and add, unleſs you allow that the general received qualities of bark before mentioned render it an improper medicine in the beginning of a ſhip fever, and altogether inferior to the antimonial and camphire treatment—which, indeed, both your practice and experience I ſee contradict—I drop the argument—And I conclude by telling you, that you had better drop it; for I never will, in deference to any author dead or living, ſacrifice the fruits of experience dearly purchaſed for the benefit of mankind, and often at the riſk of my own life, by admitting for truth, what is only founded in erroneous opinion.

Beſides the medicines already mentioned, I ſometimes thought it neceſſary to add from ten to fifteen grains of cort. eleuther. pulv. to every doſe of the bark; or a decoction of two drachms of rad. ſerp. Virg. in ſimple water, to two ounces of the bark. But when, and in what proportion other medicines are to be joined with it, the patient's ſituation, and the judgment of the practioner muſt regulate.

Further: young practitioners muſt neither reſt ſatisfied, nor conclude that they have done their

their duty, becauſe they have preſcribed medicine. They ſhould be certain that they are properly adminiſtered with a due proportion of drink; and be informed where incidental ſymptoms occur, that if violent, they may endeavour to relieve them immediately. If they are inattentive to their patients, their aſſiſtants will probably be more ſo, and thoſe who attend the ſick will aſſuredly be ſo. When their patients want diet, they ſhould order the moſt ſuitable, that circumſtances afford, in ſmall quantities, and often. Of all cordials, from long experience, I prefer and recommend wine: other remedies are not more inferior to bark, than all the claſs of cordials are to wine. It is often neceſſary to adminiſter it throughout the fever, and when the ſick arrive at a convaleſcent ſtate, if it is judiciouſly given as part of their diet, it will be found the beſt of all corroborants and antiſcorbutics.

Notwithſtanding the ſuperior virtues of bark in curing the ſhip fever, we muſt forwarn young practitioners againſt forming an expectation that it will either prove infallible, or will cure their patients in as ſhort time as it does the tertian of hot climates, more eſpecially ſhould the patients have been ill ſeveral days before they complain. If they imagine a few doſes will cure them, they will probably add to the number who unjuſtly report 'that the bark failed them.'—I cannot

even

even take it upon me to ſay what number of days it may be neceſſary to give it:—that will ever depend on the degree of virulence of infection, the climate and ſeaſon, the age and conſtitution of the patient, and other circumſtances;—they muſt therefore continue to adminiſter it until their patients are cured; paying more regard to the effects, than to the number of doſes they give.

In a word, though the deſcription of the fever which we have laid down, is a faithful copy of nature, we muſt confeſs that it is not in the power of man to lay down one that would be found applicable to every caſe that may occur The ſame is to be underſtood reſpecting the adminiſtration of bark: for though that medicine will moſt probably cure all of them, the manner of preſcribing it muſt be varied according to circumſtances. Such variety there is in human nature, and under ſo great a diverſity of circumſtances does it exiſt.

I might inſert hundreds of caſes of the ſhip fever, and the method in which they were managed; yet the young practitioner might never meet with one in his own practice exactly ſimilar to one of them, or that would require the ſame proportion of medicines. Like the patients themſelves, though all of the ſame ſpecies, how ſeldom do we ſee any two alike in features, or eat and drink the ſame quantity. Practitioners muſt

muſt therefore be mindful that we have only, after the manner of ſome painters, laid the outlines of the piece or figure, before them, the finiſhing muſt be left to their own judgement and ſkill; and with theſe, to do it with tolerable ſatisfaction to themſelves, if I miſtake not, they muſt unite their utmoſt attention.

CHAP. V.

CASES *which terminated fatally.*

CASE I.

THO. Wakeland, a marine, aged about 25, of a thin habit, and inclined to drink, complained on the evening of the 25th of April, 1780, of having been ſeized with giddineſs, and alternate chills and heats; laſſitude and debility. Emet. ſtatim, ac ſudorific. h. ſ. dedi, and allowed him ſage tea with nitre, to drink throughout the night.

2. He had no remiſſion this morning, and was coſtive. I ordered the common purging draught for him, and the bark twice in the afternoon.

3. He

3. He had a ſlight remiſſion after perſpiring in the night. Cort. ʒi. ſecunda quaque hora præſcripſi, ac potionem ad libitum.

4. He complained of dyſpnœa, pain at the præcordia, and cough at times, after having a very bad night from raving; the pulſe was quick and ſmall, and the ſkin moderately cool.—Ut heri præſcripſi. PM. he had a ſlight belly-ach.

5. He raved again in the night; the tongue was browniſh, very foul, and rather ſhrivelled, the ſkin was cool, and the pulſe ſmaller and quicker than natural; the countenance was much diſeaſed, but he thought himſelf better.—Corticem ut ʒtio cepit, et vini pauxillum in potione.

6. The cough and pain about the præcordia were more urgent, and the debility was greater this morning. Ut heri præſcripſi, et præcordis tinct. cantharid. applicand. PM. ſal. ſuc. gr.v. atq; corticem ut heri adhibui.

7. A remiſſion after a moderate perſpiration. Medicinas ſuas ut heri cepit. PM. exacerbation. Sexta hora ſal. ſuccin. gr.ix. atq; corticem deglutiit; epithem. utitur, et clyſma injeci.

8. He had a remiſſion, but he put out his tongue with much difficulty, as was the caſe with him for ſome days paſt, though it was now much cleaner. He had two copious ſtools with the clyſter laſt night; the pulſe and ſkin were in the

ſame

ſame ſtate as on the 4th day. Præſcripſi corticem, teriia quaque hora, et vinum ut 5to die.

9. He was diſturbed in his ſleep with wandering; in the morning he thought himſelf better, but could not put his tongue out until his mouth was moiſtened, it was ſo dry and rough; the pulſe was much firmer, and the ſkin was now hot and dry. Ut heri præſcripſi, et ſal. ammon. crud. gr. v. atq; cort. PM. a moſt violent exacerbation was brought on from wine being given him by his meſſmates. He now laid hold of his tongue, and pulled it out of the mouth, when he was aſked to ſhew it; the dyſpnœa was extreme, during which the thorax ſeemed to be pulled upwards and downwards with vehemence, as well as the trachæa arteria, which at the ſame time was much projected at every reſpiration; the countenance was dejected, the ſkin very hot, and quite dry; the pulſe rapid, the face covered with ſweat, and he was ſpeechleſs at times. Veſicat. præcordiis, ubi epithem cantharid. utitur, fuit admotum, et tart. emet. gr ß. ut viſum, atq; tinct. thebaic. gut. xx. 10ma hora dedi.

10. I perceived a degree of rattling in the throat laſt night; he had two looſe ſtools from the tartar emetic; at eight this morning he had a remiſſion, and complained of the bliſter. PM. he rambled conſtantly. Cort. ut heri, atq; vinum ut viſum dedi.

11. The pulſe was firmer and more regular, in other reſpects he continued as yeſterday. —Ut heri adhuc præſcripſi. PM. a ſevere exacerbation returned, reſpiration was extremely laborious; the abdomen more agitated than the thorax, and there was the ſame appearance about the larynx as on the 9th, the rattling more perceptible, and the lower extremities cold. Tinct. theb. gut. xx. decima hora pm.

12. He ſeemed to breathe with more eaſe, though with a diſagreeable noiſe; the countenance had the hippocratic appearance. Medic. ut heri cepit. PM. uneaſineſs about the abdomen, and the lower extremities continued cold; the clyſter procured him one copious ſtool. Enem. emollien. injeci; et tart. emet. grß. dedi.

13. This morning the patient provoked vomiting by putting his fingers down his throat and pulling out his tongue, when no perſon was in ſight, and he afterwards picked his teeth:—I ſuſpected he had worms. 4 pm. the upper extremities became cold, and at 11 he died.

In this caſe, no man can with juſtice ſay that the bark failed; for until the afternoon of the 9th, when wine was imprudently given him, there was every appearance that he ſhould do well, at leaſt there was no bad appearance about him. I therefore ſcrupled not to aſſert at the time, that he was as much killed by the wine, as

as if he had been ſhot; and I am firmly of that opinion. Another patient got wine from his meſsmates at the ſame time, and narrowly eſcaped with his life.

CASE II. Iſaac Kidd, a ſeaman, aged about 58, of a bad conſtitution, complained on the 17th of May, of the general ſymptoms of fever, (as I was told, for I did not ſee him) and took an emetic, and the purging draught.

2. He was greatly dejected when I ſaw him, and complained of debility and laſſitude. Cort. ʒi. quater in die, et anodyn. h. ſ. præſcripſi.

3. He complained as before; cort. tertia quaque hora dedi.

4. I was told there was no alteration about him. Cort. ut heri fuit præſcripta. PM. he became worſe, as I was informed.

5. He was thought to be much the ſame. Medicin. ut heri cepit. He walked about in the afternoon, and about midnight (as I was informed afterwards) he became ſpeechleſs and very reſtleſs. Nothing more was done for him.

6. He died at three in the morning.

Bad weather prevented me from ſeeing this man more than twice; and that was on the mornings of the 2d and 3d days only. I therefore cannot draw any inference from this caſe.

CASE III. Edward Norman, a ſeaman, was ſeized in the afternoon of the 27th of May, with the uſual ſymptoms of the ſhip fever. I ordered the emetic and purging draught together, and the ſudorific at bed-time.

2. There was a remiſſion of the ſymptoms. Cort. quater in die præſcripſi.

3. An exacerbation, I was told, came on laſt evening, and went off in the night. Cortex fuit ter in die præſcripta. PM. an exacerbation returned with rambling.

4. He paſſed the night ill from inquietude, rambling, head-ach, pain about the thorax and difficult reſpiration. AM. a remiſſion; at 6 pm. the remiſſion continued.—His noſe bled a few drops. Cort. ſecunda quaq; hora dedi. 8 am. veſicat. inter ſcap. admov.—I went aſhore.

5. I was informed that about eight laſt night the exacerbation returned with great dyſpnœa, and rambling, and that he died about five in the morning.

I only ſaw this man on the 4th day of his illneſs; beſides, the ſhip was at Spithead, and bum-boat women brought liquor and ſtrong beer on board, which their meſſmates, eſpecially when drunk, always give to the ſick,—and as the two laſt caſes almoſt certainly fell under this predicament, I am not of opinion that the bark had fair play in any of them.

CASE

CASE IV. James Gray, of a very eaſy temper, of a lax fibre, and ſubject to hæmorrhage from the noſe, complained on the 29th of May, of the uſual ſymptoms of fever, as I was told. Emet. et ſudorif. cepit.

2. A perfect remiſſion; the vomit purged him. Corticem bis in die præſcripſi.

3. He continued to recover. Cort. ter hodie fuit præſcripta.

4. He recovered his ſtrength ſlowly. Cort. quater dedi.

5. He relapſed. Corticem ſecunda quaque hora, et veſicat. inter ſcapulas præſcripſi.

6. He complained much of inquietude, heat, and thirſt. Cort. ut heri cepit. PM. a violent hæmorrhage from the left noſtril reduced him to extreme weakneſs; calling upon him accidentally, I found, as I judged, a pound weightof blood in the bucket. Cort. ʒi. alum. com. gr. x. aq. ſimp. ℥ij. fiat hauſt. ſingulis horis repetend.—et vin. cochlear. i. ut viſum. ſumat. The ſecond doſe of the medicine entirely ſtopped the hæmorrhage; dein. alum. fuit omiſſum.

7. Debility and faintneſs with cough at times. Ut beri, ſine alumine, præſcripſi. PM. a little hæmorrhage. Alumen ut heri cepit; ac vini cochleare ut viſum.

8. Great

8. Great thirſt, with a dry brown tongue, diſtreſſed him; a bloody ſerum oozed from the noſtril. Corticem et vinum ut heri dedi.

9. Extreme debility, catchings, or convulſive twitches, an unnatural reſpiration, urgent cough, and ſwallowing what he expectorates; and ſordes about the mouth. Medicin. ut heri, ſal. ſuccin. et ammoniac. gr. iv. ſecunda quaque hora cepit.

10. About midnight a violent exacerbation came on with dyſpnæa and oppreſſion about the præcordia. Medicin. ut heri, et veſicat. ſcrobic: cordis admovi. PM. raving, inquietude and the cough were diſtreſſing; when he was aſked to put out his tongue, he pulled it out of the mouth, and downwards; he was alſo coſtive. Enema injeci.

11. He had a ſtool from the clyſter, and the tongue was clean, though the teeth were covered with ſordes; he raved at times through the night, and was deſirous to get out of bed, but complained only of weakneſs; there was a convulſive motion of the lower lip, and the voice was altered. Ut heri; et pm. rad. ſerp. Virg. decoct. dedi, atque cortic. omiſſo vino.

12. He was worſe; the pulſe was quick and weaker, and his eyes were generally ſhut. Medicinas adhuc cepit. PM. ſal. ſuccin. gr. x.

quarta

quarta quaq; hora; aliter ut nona præſcripſi, et enema fuit repetitum.

13. Tremors increaſed, and he became ſpeechleſs at times, and coughed rather leſs. Cort. ʒi. ſal. ammon. cr. gr. viii. ſecunda quaque hora, atq; vin. pauxillum ut viſum præſcripſi; veſic. femoribus internis admovi.

14. His appearance and ſymptoms varied.—AM. the countenance was more lively, but the tremors, or rather univerſal paralyſis, with raving and inquietude continued. Ut heri, atque rad. ſerp. virg. decoct. PM. the paralyſis abated: a ſubſultus tendinum was obſerved through the day; and he voided an uncommonly large and healthy-like ſtool.

15. He had an exacerbation of heat, and inquietude the firſt part of the night, accompanied with a quick, full pulſe, and towards morning a remiſſion. At noon the paralyſis returned with a very diſeaſed countenance, and he ſweated about an hour. PM. the paralyſis remitted: 6 AM. tart. emet. gr . atq; decima hora am. iterum, medicinas ut heri cepit.

16. He paſſed the night ill from inquietude, paralyſis, and other ſymptoms of death. Ut heri decima hora præſcripſi. PM. rigidity and continual motion of the limbs, with ſweat, chiefly on the forehead.

17. About

17. About eleven laſt night a profuſe ſweat broke out, which laſted only a ſhort time; but he continued in a ſtate of perſpiration for ſeveral hours. AM. the countenance was tending to the hippocratic, and there was a conſtant motion of the mouth as if he had been taſting ſomething; the paralyſis was elſewhere ſcarcely perceptible; the ſkin was moderately cool and ſoft, and the pulſe was firmer and more regular than for many days paſt.——PM. he was extremely weak, and the tongue very ſore, tho' he continued better. Medicinas quarta quaque hora, et vin. pauxillim ut viſum cepit.

18. About 8 laſt night frequent catchings, ſtartings, and ſubſultus tendinum came on; the face was covered with profuſe ſweat, the pulſe was very weak and irregular, and twice he ſhewed a diſpoſition to get out of bed, by putting his legs and arms out; at other times he lay on his back, with his eyes generally ſhut. His ſkin was moiſt and ſoft. AM. the countenance looked better, though the eyes were ſhut. PM. he was diſtreſſed with a teazing cough, and he was coſtive. Medicinas quas 15to die 10ma hora am. præſcripſi, nunc quarta quaque hora cepit, et diæta maxime idonea. PM. enema emolliens fuit injectum.

19. Between twelve and four in the night he lay quiet; before and afterwards, he was, from inquietude, with difficulty kept in bed and at

8 am.

8 am. he died. Query—Did not this man's death proceed from the hæmorrhage on the 6th? I have not a doubt of it.

CASE V. George Hogg, the ſhip's barber, much addicted to tipling, after drooping a month, principally with cough and various pains, complained on the evening of the 7th of June, of the general ſymptoms of fever, and a cough. Emetic. et ſudorific. dedi.

2. He perceived no alteration; the ſymptoms were not violent.—Sal. cath. amar. ℥i. ſumat. et pm. corticem Peruv.

3. He complained of thirſt and univerſal ſoreneſs.—Cort. quater in die ſumat.

4. Debility, cough, and pain about the thorax, attended with anxiety, harraſſed him; the ſkin and pulſe hitherto were very little hotter or quicker than natural. Cort. quater atque tart. emet. gr$\frac{1}{4}$. cepit.

5. He had a remiſſion. Ut 3tia præſcripſi.

6. He continued better after a tolerable night's reſt. Corticem ut heri dedi.

7. He was diſturbed in the night with frightful dreams; the countenance always ſeemed a little fluſhed; the pulſe was quick, and the ſkin

hotter than natural, and the tongue had a boiled-like appearance. Cort. ſecunda quaq; hora præicripſi.

8. He had an exacerbation, after paſſing the night ill from inquietude, but his chief complaint was of perpetual dryneſs of his mouth.—Ut heri medicinam adhibui.

9. He complained only as he did yeſterday, and of thirſt. Cort. atque rad. ſerp. Virg. decoctum ut heri deglutivit.

10. He reſted ill from inquietude and wandering dreams; the cheeks rather more fluſhed; he ſeemed very anxious, but complained of debility only. Ut heri præſcripſi.

11. He had a tolerable night; there was no alteration, however, and he did not take his medicine:—he was coſtive. Sal. cath. am. ℥ ß. atque cort. ut heri ſumpſit.

12. He was reſtleſs about the middle of the night, and at other times doſed inſenſibly; debility was his only complaint; he had no appetite ſince he was taken ill. Ut heri, ſine ſal. cath.

13. A remiſſion ſucceeded a profuſe ſweat, in the morning; there was an exacerbation pm. Corticem adhuc cepit, et vini paux. ut viſum.

24. He perſpired twice in the night, and ſtarted once out of his ſleep in a fright, but there

there was a remiſſion in the morning.—Ut heri præſcripſi.

15. He had a tolerable good night, was generally in a moderate ſtate of perſpiration, and was ſenſibly ſtronger. Corticem quarta quaque hora atq; ſal. ammon. cr. gr. v. dedi:—aliter ut heri præſcripſi.

16. An exacerbation with fluſhed countenance, the pomegranate appearance of the tongue, and deſpondency came on;—but I was informed that he had all along ſaid that he would not recover. He had no ſtool yeſterday.—Ut nono, atque vinum ut viſum præſcripſi. Enema com. fuit inject. et veſicat. inter ſcapulas admotum. PM. the bliſter pained him, and he had a ſlight remiſſion, but in the evening an exacerbation returned.

17. He ſlept, and perſpired moderately in the night, which brought on a remiſſion.—Ut heri, unaquaque hora medicinas dedi, atque vinum. PM. he complained of a pain about the left ilium, which was accompanied with a moſt profuſe diarrhœa, that harraſſed and weakened him exceedingly. I perceived tremors on him at times. Anodyn. ut viſum dedi.

18. There was no heat or quickneſs of the pulſe; on the contrary, the ſkin was moiſt, and the tremors leſs perceptible after a good night.—He wandered a little at times, and was

ſo weak that he could not put his tongue out.—Medic. ut heri, hodie; atq; vinum et opium ut viſum, præſcripſi. PM. there was an exacerbation of the tremors. I obſerved a hiccough at times; he again complained of the pain of the ilium, and the tongue was enlarged.

19. He reſted tolerably, and the diarrhœa, which had the bark appearance, was abated; but the tremors and hiccough were diſtreſſing, as was a ſubſultus tendinum. I omitted his medicines, and allowed him milk, and wine frequently. He reached at times with the cough, (for it continued all along, more or leſs) and threw up a clear watery ſtuff. I alſo injected the following clyſter:—an ounce of portable ſoup diſſolved in ten ounces of boiling water, to which half an ounce of bark and one grain of opium were added, at ten in the morning and ſix in the afternoon. PM. the pulſe was tremulous at times, but he thought himſelf better.

20. The hiccough frequently harraſſed him greatly; ſubinde ol. cinnam. gut. i. cum ſacch. alb. fruſtulo cepit; and he ſpit up ſometimes a bloody and extremely viſcid phlegm through the night, and had a ſtool; he became ſtronger, the pulſe was firmer, and he put his tongue out. Ut heri præſcripſi.—PM. the hiccough, ſubſultus, cough, and reaching at times

times became fatiguing, the ſtrength failed, and the pulſe fluttered.

21. The complaints continued through the night; he never brought the milk up when he reached. Ut heri præſcripſi; ſed primo enema emolliens (aq. ſimp. ℥x. ſacchar. iv. axung. ℥ij. fiat enema) injiciendum. In the forenoon his face was covered with a greaſy ſhining moiſture and the countenance became hippocratic. Univerſal paralyſis, and at two pm. he died.

CASE VI. John Blair was ſeized the 27th of June in the evening; he complained of the general ſymptoms of fever, of which he was ſo much relieved by a vomit and ſudorific, that he thought himſelf well, and did his duty.

On the evening of the 2d of July, however, he returned, having the head-ach, great pain about the præcordia, extreme depreſſion, a very diſeaſed countenance, and total proſtration of ſtrength; he informed me that he had been ſeized the preceding evening with ſhivering, ſevere head-ach, and the uſual ſymptoms of fever. Statim ut 27mo ult. deinde corticem ſecunda quaque hora per noctem præſcripſi.

2. I found hardly any alteration.—Corticem adhuc cepit, atque opium ut viſum. PM. he had a very ſlight remiſſion.

3. He was diſtreſſed with diarrhœa, griping, extreme giddineſs, and debility and the countenance

ſeemed

ſeemed bloated; the pulſe was very moderate, and the ſkin cool. At 4 pm. an exacerbation came on:—corticem et opium ut heri, atq; vin. ut viſum præſcripſi.

4. A remiſſion of all the complaints excepting the giddineſs and proſtration of ſtrength and ſpirits; he coughed at times, which brought on pain about the præcordia, and the tongue was brown and rough. PM. an exacerbation with a convulſive catching, hiccough, and a dejected countenance. Medicinas, ſine opio, ut heri, atque vinum libere dedi; et veſicat. præcordiis admovi.

5. Scarce any alteration, only the pulſe was very weak and low. PM. the pulſe altered variouſly in the courſe of the day; inordinate craving for water to drink, and to go aſhore, though he ſeldom ſpoke; the ſkin was hot at one time, and the tunica albuginea was yellowiſh. Ut heri; ac tinct. cort. Huxham. ℥ß. præſcripſi; but it did not agree with him:—10 pm. ſal. ſuccin. gr. ix. cepit.

6. He was comatoſe, and ſeldom ſpoke, and tho' more and more exhauſted, thought himſelf better; and the pulſe ſeemed firmer and more regular. PM. involuntary diſcharges of urine and fæces: the diſcharge from the bliſter was of a dark coloured ſanies, and the bliſtered part had

had the ſame appearance; he pulled at the bed-cloaths, holding them to look at, and throwing his legs out of bed. Medic. ut heri, et ſal. ſuccin. gr. xii. decima hora pm. cepit.

7. He died at eight in the morning.

His meſſmate informed me that he was never well from the firſt attack on the 27th of June, and on the 2d of July he complained again. A ſevere head-ach was his chief diſeaſe at that time. I underſtood further, that he had ſeveral old venereal ſymptoms.

This caſe was evidently deſperate from the beginning.

CHAP. VI.

CASES *to illuſtrate the Management of the* FEVER.

AS the following caſes are intended to illuſtrate the different heads under which we have reduced the management of the Ship Fever, it is not to be expected that the order, as to time when they occurred, will be regarded.

1. *Vomiting.*

1. *Vomiting.*—We have already repeatedly obſerved, that if vomits be adminiſtered when the firſt ſymptoms of contagion are perceived, or during the cold, or the ſhivering fit of the firſt paroxyſm, they frequently become preventives of the fever.

CASE VII. Robert Dean, aged about 20 years, came lately from the Conqueſtadore guard-ſhip at the Nore, and complained on the 10th of September, 1779, of ſhivering, ſickneſs at ſtomach, head ach, and univerſal pains, eſpecially of the loins. A vomit was immediately preſcribed, which operated well, and gave him a copious ſtool or two. The ſymptoms were carried off, he ſlept well, and next day he only felt himſelf a little weaker than uſual. I gave him two doſes of the bark, with fifteen drops of elixir of vitriol, and on the day following he returned to his duty, quite well.

CASE VIII. Mr. Knight, about 32 years of age, a temperate man, complained on the 19th of September, 1779, of head-ach, ſickneſs at ſtomach, and thirſt; the pulſe was rather quicker, and the ſkin hotter than natural; he had not perceived any chilneſs or ſhivering to precede theſe ſymptoms. I gave him an emetic, and next day he was perfectly well.

CASE

CASE IX. Chriſtopher Forſter, aged about 19, complained on the 2d of October, 1779, of alternate chills and heats, head-ach, univerſal pains and thirſt. A vomit was immediately preſcribed; the third he found a little weakneſs, took the bark twice, and returned the 4th to his duty.

CASE X. John Oſborne, an Eaſt-India molattoe, aged about 18, was ſeized the 16th of Oct. 1779. with all the general ſymptoms of the ſhip fever, I preſcribed the vomit immediately; the next day he was ſo well, that I ordered a light diet only for him; and on the 18th he returned to duty.

Beſides theſe I could inſert many other caſes to prove the great importance of giving vomits on the firſt attack of the fever.

2. *Sudorifics.*—When the vomit did not entirely carry off the ſymptoms, the patients have been frequently cured by a ſudorific given afterwards.

CASE XII. Joſeph Clun, aged about 28, was ſeized on the 18th of October, 1776, with the general ſymptoms of the fever; and not being entirely freed from his complaints by vomit, which he took immediately, I ordered

him a ſudorific :—that day he complained of a ſlight debility only. He took fifteen grains of cort. eleuther. twice, and returned to his duty on the 20th.

CASE XII. James Thacker, aged about 23, was ſeized the 23d of November, with the general ſymptoms of fever; and for the ſame reaſon as in the preceding caſe, a ſudorific was preſcribed at bed-time. On the 24th, being free of the ſymptoms, but weak, I gave him a few doſes of bark, and next day he returned to his duty.

3. *Cathartics*.—Although it does not occur to me that I ever ſaw a patient cured of the fever by cathartics alone, or that I ever ſaw them given before vomits, yet I have often found it neceſſary to preſcribe them after both the vomit and ſudorifics to perfect the cure. We ſhall only inſert two or three caſes.

CASE XIII. Mr. Mitchel, aged about 22, a ſtrong, healthy young man, having on the 5th of October, 1779, been on duty on board the Dunkirk guardſhip, where the ſhip fever was very virulent, the day following he complained of a fever; the pulſe was quick, and the ſkin hot and dry; his head-ached, and he was much harraſſed with a griping and purging. I ordered him

him a vomit and diluting drinks. On the 7th he was greatly relieved, after the vomit, which operated likewiſe by ſtool and perſpiration, but the dyſenteric ſymptoms were not gone; he therefore took a cathartic, and returned on the 8th to his duty.

CASE XIV. Richard Sullivan, about 25 years of age, complained the 4th of November, 1779, of ſhivering, head-ach, and purging. An emetic was adminiſtered; and next day as the purging was not quite gone off, he took a gentle cathartic, and returned to duty on the 6th.

CASE XV. John Cummings, aged about 24, was ſeized on the 9th of November, 1779, with alternate chills and heats, head-ach, and univerſal pains. I immediately gave him a vomit, and a ſudorific at bed-time. The 10th, the head-ach and univerſal pain, though alleviated, were yet troubleſome; I preſcribed a cathartic, and next day he found himſelf perfectly well.

4. *Of Bliſters.*—We might inſert many caſes to ſhow the great benefit derived from an early application of them; but as repetitions are tireſome, we ſhall only mention four.

CASE XVI. Michael Irving complained on the evening of the 5th of February, 1780, of the general ſymptoms of the fever, for which he took a vomit, and a ſudorific at bed-time. There was a remiſſion next morning, but in the afternoon an exacerbation, eſpecially of the head-ach:—Matutino cath, mite cepit, et pm. veſicat. inter ſcapulas admovi.

On the 7th he was perfectly free of complaints, except from the pain of the bliſter, and he returned to duty as ſoon as his back was well.

CASE XVII. John Putnam, aged about 37, was ſeized with the general ſymptoms of the fever on the evening of the 23d of May. A vomit and ſudorific were preſcribed, and next day the cathartic, and at night the ſudorific was repeated. On the morning of the 25th there was no remiſſion; the head-ach, giddineſs, ſickneſs at ſtomach, and wandering pains, diſtreſſed him greatly. I ordered him the bark every three hours, and a bliſter to be applied between his ſhoulders. He paſſed the night ill from wandering and inquietude; but there was a remiſſion of all the ſymptoms in the morning, and no return of them afterwards. The bark was continued, though ſeldomer, until he returned to his duty.

CASE

CASE XVIII. James Farrel, a marine, aged about 26, complained on the 20th of June, 1780, of the uſual ſymptoms of fever, for which he took the tart. emet. and ſalts together, and the ſudorific in the evening. The 21ſt the headach and proſtration of ſtrength and ſpirits continued. I applied a bliſter between the ſhoulders, and ordered him the bark. On the 22d he was free of every complaint but debility, and had no return of the ſymptoms.

The bark was preſcribed until his back was healed.

CASE XIX. John Howe, about 25 years of age, was ſeized on the 27th, but did not complain until the morning of the 28th of June, 1780, of the uſual ſymptoms of fever, and immediately took the emetic and cathartic together; and pm. I ordered him the bark. On the 29th there was no remiſſion, though he had been vomited, purged and ſweated by his medicines, and the countenance was much diſeaſed; the bark was continued four times in the day, and a bliſter applied between his ſhoulders. On the 30th he complained of the bliſter only, and never had any return of the fever, but he took the bark twice or thrice until his back healed.

5. *Of Bark.*—As upon this we not only place our chief dependence for the cure, but are to prove by the cleareſt negative evidence, how fatal

fatal the precept—not to adminiſter bark early in fevers—has been to mankind, we muſt neceſſarily be more particular on this, than we have been on any of the former heads. We ſhall, therefore, firſt ſhow how innocent and effectual it is, when given in the beginning of the ſhip fever, without either an emetic or cathartic having been preſcribed before or with it. We ſhall, ſecondly, inſert a few caſes, out of hundreds, which we have ſucceſsfully managed by adminiſtering bark early and liberally. Thirdly, we ſhall ſtate the caſes which ended fatally :— And laſtly, we ſhall conclude with a few inferences.

Firſt we are to ſhow how innocent and effectual the bark is when given in the beginning of the ſhip fever, without either an emetic or a cathartic having been taken before or with it.

CASE XX. Mr. R. aged about 38, of a healthy, tho' delicate conſtitution, temperate in his living, and well accuſtomed to different climates, without being affected by them, arrived at Gibraltar on the 19th of Jan. 1780, in perfect health ; but no ſooner did the wind veer round to the Eaſtward, than he was ſeized with the ſymptoms of fever ; and thoſe were always increaſed when it blew a Levanter.* As long as this gentle-

* When the wind blows ſtrong from the Eaſtward.

gentleman ſtaid there, he was regularly affected by thoſe winds, and conſtantly relieved by a liberal uſe of the bark, without giving any medicine previous to it: ſometimes about a ſixth or a fourth of a grain of emetic tartar were joined with it. He varied his diet and living as little as poſſible.

On the 10th of April, the wind then NW. and Weſterly, blowing ſtrong at noon, (having for a conſiderable time before been much expoſed to infection among the priſoners in the hoſpital where his duty led him) he felt the pains coming on about eight in the evening, which he had hitherto been ſubject to, only during the approach and continuance of the eaſterly winds; and expecting the change of weather, he continued on his duty, and took a little tincture of bark twice.

On the 11th, the pains were more ſevere and wandering; at one moment he had the ſenſation of being extremely fatigued, and the next he was ſo eaſy that he forgot them; ſometimes there was an unuſual heat in the ſkin; but the pulſe was very little affected. He took the tincture of bark as he had done yeſterday; went with languor about his duty, and imprudently walked and ſtood a good deal in the ſun; and afterwards went off in a boat during the ſtrength of the breeze. He could eat little dinner from

the

the fatigue, and paſſed the night indifferently, the pains being increaſed.

12. Finding himſelf worſe, the pulſe rather weaker than natural, and irregular, together with a ſlight nauſea, he took tinct. cort. ℥ ß. tart. emet. gr. $\frac{1}{4}$. thrice in the afternoon. However, perceiving a chilneſs come on at ten in the evening, he began with the bark in ſubſtance. Pulv. cort. Peruv. ℈iv. tinct. cort. ʒij. aq. vel potione thæ ℥ij. ſtatim cepit. At 11 he was not colder, and repeated his medicine. He was ſo diſtreſſed with fever, ſeverity of pains, and headach, that he lay down in bed at noon; ſoon after, he repeated his draught with ſal. ſuccin. gr. viij. and drank freely of warm tamarind beverage. The heat was vehement, the pulſe was rapid, and the pain darted violently from one place to another during the hot fit which was ſucceeded by a profuſe ſweat, and that gradually brought on a remiſſion about four pm. Notwithſtanding the ſeverity of the paroxyſm, neither his reaſon nor ſpirits were the leaſt affected, but he was aſtoniſhed to feel himſelf ſo extremely weak, and the head ſo greatly diſeaſed, though not pained when he got out of bed at four. He repeated his bark thrice, and took x. grains more of ſal. ſuccin. when he went to-bed at eight o'clock, having firſt a copious ſtool.

13. The remiſſion was more diſtinct, though the head ſeemed greatly diſturbed, after he had enjoyed

enjoyed a tranquil and very pleaſing night, and though extremely weak, he went about his duty on board, taking his bark every two hours.

14. He had a good night, continued his bark, and with the firſt doſe took an ounce of ſalts, and two drams of crem. tart.—He perſiſted in taking his bark, and never had any return of the fever while he lay at Gibraltar, but did not recover his ſtrength until he left it on the 20th; and ever ſince he has enjoyed a good ſtate of health. At bed-time on the 12th, and on the evening of the 13th, he took ten grains of ſal. ſuccin. without perceiving any effect from it.

CASE XXI. Mr. Blake, aged about 22 years of age, of a ſtout make, and robuſt conſtitution, was ſeized on the 13th of June, about noon, with a ſevere paroxyſm of fever, which terminated in a remiſſion about ſix pm. by ſweat. It was then he complained; the head-ach, univerſal pains, eſpecially lumbago and debility, chiefly diſtreſſed him. I ordered him cort. Peruv. p. ʒij. immediately, and to be repeated before he went to-bed.

On the 14th in the morning he was much relieved, and in the courſe of the day took an ounce of the bark.—The day following he returned to his duty, and never had a relapſe.

Secondly, we are to inſert a few caſes, out of hundreds, which we have ſucceſsfully managed by adminiſtering bark early in the fever, and liberally.

CASE XXII. George Alexander, aged about thirty-ſix, ſomewhat ſlothful, was ſeized on the 25th of October, 1779, with a great proſtration of ſtrength and ſpirits—or faintneſs, as he expreſſed it. On the 26th, about 11 in the morning, he was brought to me, immediately after he had recovered out of a ſyncope, into which he had fallen ſome time before. His complaints were extreme weakneſs and laſſitude, and confuſion of the head; while the countenance was greatly diſeaſed, the pulſe languid, and ſkin cold; a vomit was ordered, and two drams of bark to be taken an hour after the vomiting, and to be repeated thrice in the afternoon. In the evening there was an exacerbation of heat and thirſt.

27. The fever was very moderate in the morning, and he complained, but little, of his head, and univerſal ſoreneſs, after having had a good night. I ordered his bark to be continued.

28. He felt himſelf eaſy, though weak, and had very little fever or thirſt on him. An ounce of bark was again preſcribed, and half an allowance* of wine. He afterwards continued to take

* 'Tis about ſeven ounces by meaſure.

take his wine, and half an ounce of bark daily, until he returned to his duty on the 1ſt of Nov.

CASE XXIII. Wm Hogarth, aged about 18, of a lax fibre, on the 14th of Jan. 1780, was ſeized with head-ach at one am. which abated again, and about 10 am. he fell into a ſyncope. As ſoon as he was recovered out of it, by the uſe of ſp. C.C. he took a vomit.

15. He paſſed an indifferent night, complained of great pain acroſs the os frontis; the tongue was beginnihg to grow black, and the lips to be covered with ſordes; the pulſe was very quick, and the ſkin and muſcles were exceeding hot, and preternaturally ſoft and relaxed. In the morning I ordered the uſual cathartic, as he had no ſtool by the vomit. At 11 I was informed he had again fallen into a ſyncope. The bark was preſcribed every two hours.

16. He complained of debility and a little giddineſs, and was ordered to take his bark every three hours. PM. he was at his quarters during the action with the Spaniſh fleet, and had no return of the fever, nor took any more medicine.

CASE XXIV. Lieut. Saunders, aged about 31, of a hale conſtitution, was ſeized, on the 26th of October, 1779, with heavineſs, laſſitude, ſtretching of the extremities, chilline ſs, and a pain

pain, with a little ſwelling and hardneſs of the right groin. I propoſed a vomit, which he declined taking; and at three pm. a ſevere ſhivering came on with head-ach, univerſal pains, eſpecially lumbago. He now took a vomit; a hot fit, with an exacerbation of the ſymptoms, ſucceeded; and at night he took five grains of ſal. C.C. and half a grain of opium, in the form of a bolus.

27. He was ſomewhat relieved by the vomit, but more by a free perſpiration through the night; the groin was much better; however, the head-ach continued, and he was coſtive. In the morning he took the common purge of ſalts and cream of tartar, and in the afternoon two drams of the bark, twice, with a ſpoonful of wine, in water.

28. He found himſelf recovering, after a good night; and the bark was repeated, four times, as he had taken it yeſterday. He had no relapſe, and took his bark twice a-day for a few days, tho' he returned to his duty on the 30th.

CASE XXV. Wm Coates, about 22 years of age, of a thin habit, after drooping ſome days, complained, on the 5th of November, 1779, am. of a ſore throat; he ſpoke through his noſe, and ſeemed to have much difficulty in ſwallowing; the uvula and tonſils were much tumified, and the pulſe was much quicker and weaker than natural,

natural. The vomit was preſcribed, and in two hours after its operation, the cathartic. PM. a bliſter was applied between his ſhoulders, and a ſudorific given him at bed-time, after uſing the pediluvium.

6. He was much relieved, but coſtive; the cathartic was repeated in ſmall doſes, until it operated. PM. he continued eaſier, having perſpired all day. I ordered the bark to be given him twice in the night.

7. The pulſe was firmer, but he complained of more pain in the left ſide of the throat, and the tongue was foul. Cort. ʒij. quinquies in die dedi.

8. He paſſed the night ill from the pain and an urgent cough; the pain now extended from the thyroid gland down to the ſternum, and the pulſe was quick and ſmall. PM. he complained of alternate chills and heats.—Corticem ut heri præſcripſi.

9. The pain remitted. PM. he had very irregular or uncertain ſweats and remiſſions thro' the day.—Corticem adhuc cepit, et gargariſmo ſæpe utitur.

10. Exacerbation of the pain of the left ſide, and cough. Cort. ʒij. quater ſumat.

11. Remiſſion, after having paſſed a good night. Sal. cath. amar. ℥ ß. capiat:—aliter ut heri.

12. He

He continued better, but the cough was teazing at times. Cort. ʒi. ter capiat. The cough did not leave him until the 20th, and during that time he took the bark twice a-day, and an emollient linctus was preſcribed.

CASE XXVI. Wm Crane complained on the 8th of Nov. 1779, of having been ſeized the day before with alternate chills and heats, and a ſore throat; the tonſils and uvula were now much inflamed, and covered with an exudation of pus; the tongue was foul, and the pulſe was quick. Emetic. et cathartic. ſimul ſtatim dedi; et deinde cort. ʒi. ſecunda quaque hora cepit, et gargariſmo utitur.

9. He perſpired in the night, but the throat continued painful, and the pulſe was ſmall and quick; the tongue looked as if it had been ſcalded. Cort. ʒij. quinquies in die, et gargariſmum præſcripſi.

10. There was a remiſſion of all the ſymptoms. Ut heri medic. quater cepit.

11. He continued better. Cort. ʒi. quater, et ſal. cath. amar. ℥ ß. matutino adhibui.

12. 13. He took his medicines, and returned to duty on the 14th.

CASE XXVII. Barney Clare, on the 5th of Nov. 1779, was ſeized with, and complained of the generel ſymptoms of fever. I ordered the emetic.

emetic. PM. a violent exacerbation came on with very acute pain in the lower part of the left ſide of the thorax; the pulſe was quick, hard, and full, and the ſkin very dry and hot. The vomit gave him ſeveral ſtools, and he took a ſudorific at going to-bed.

6. No remiſſion in the morning, though he ſweated profuſely throughout the night; the tongue becoming black. Sal. cath. amar. ℥ß. cort. ʒi. mane dedi; poſteaque cort. ʒij. tertia quaque hora præſcripſi.

7. Remiſſion of the pain, but he complained of head-ach, ſore throat, and hoarſeneſs, which were exaſperated by a cough. An angry eruption broke out about the mouth; however the pulſe was firmer, and his ſkin and tongue were moiſt.—Cort. ʒij. quinquies dedi.

8. His complaints gradually remitted, and he paſſed a good night. Ut heri præſcripſi. PM. an exacerbation came on, with acute pain of the ſide and cough.

9. About ten laſt night there was a remiſſion, and he paſſed a good night: the eruption drying about the mouth. Cort. ſexties in die capiat.

10. He ſlept well in the night, but a ſlight exacerbation came on. Cort. ut heri præſcripſi.

The cough was urgent at times, but he had no return of the pain of his ſide, or of fever, and he took his bark until the 15th, when he returned

returned to duty, gradually diminiſhing the number of doſes as was found proper.

CASE XXVIII. Mr. Boon, aged about 32, generally expoſed to much fatigue, after drooping about eight days, was ſeized with acute pain in the left breaſt, which was always affected, he ſaid, when he was indiſpoſed; and was ſeverer at ſome times than at others, and with univerſal pains, heat and thirſt, two days before he complained, which was on the 5th of March. A vomit was ordered, which beſides operating gave him ſeveral ſtools; and the bark was adminiſtered in the afternoon.

6. He reſted ill from the ſeverity of pain at times through the night, and his tongue was foul. I preſcribed the bark every two hours: PM. an exacerbation of heat coming on with pain, he took a doſe of the bark, which he told me, (and ſpoke it with pleaſure) carried both off in ten minutes after.

7. He enjoyed a good night, and had no conſiderable exacerbation afterwards. The bark was continued until he perfectly recovered ſtrength on the 20th. This patient had the fever once before, and once ſince, and always recovered by the ſame management.

CASE XXIX. Jas. Morris complained on the 7th of May, 1780, of irregular chills and wandering

dering pains; the counteuance was ſallow, and bloated, and he ſeemed to breathe with ſome difficulty.—Ipecac. gr. v. dedi, et pm. ſal. cath. amar. ℥i. et cort. ʒij. bis dedi. He had a fetid ſmell about him.

8. He paſſed the night ill from inquietude; head ach, and univerſal pains. Cort. ʒi. ſecunda quaque hora dedi, et ſal. cath. amar. ℥ ß. mane.

9. The fever remitted, but he complained of the other ſymptoms, and of frequent cough. Ut heri præſcripſi.

10. Exacerbation of pains, eſpecially about the thorax, dyſpnœa, an urgent cough, and expectorated with difficulty a viſcid bloody phlegm, his breath was very fetid, and he had a diſagreeable ſmell about him, and was always coſtive. Cort. ut heri atq; mann. ℥iſs.—vel ſal. cath. ℥i. et ſucc. lemon. recen. ʒiv. utitur. PM. the tongue began to put on the moſt diſeaſed appearance I have ſeen ſo early in the fever.

11. Pain of the left ſide affecting reſpiration, with an urgent cough, and no remiſſion in other reſpects.—Veſicat. lateri admovi, aliter ut heri, atque vino.

This man, before he recovered, had ſeveral relapſes, and was at laſt ſcorbutic, before he returned quite well to his duty on the 28th of June.—He uſed a good deal of bark and lemon juice, and had alſo ſeveral bliſters applied

during that time: the diſcharge from the firſt was a yellow gelatinous ſubſtance.

CASE XXX. Mr. Dixon, aged 22, of a ſtrong habit, and one of my mates, drooped for two days with chilline ſs, ſoreneſs and fullneſs about the throat, a loſs of appetite, and complained the evening of the 6th of July of ſuch exquiſite univerſal ſoreneſs, that touching any part with his finger gave him pain; of laſſitude, and of great depreſſion; the tongue was whitiſh, the pulſe was quicker, and ſkin hotter than natural. He immediately took a vomit, and a ſudorific when he went to bed.

7. The fever rather increaſed through the night, although he had ſweated profuſely, and there was no remiſſion. A purging draught was ordered in the evening, and the bark to be taken in the morning, which he omitted. PM. there was no remiſſion; the heat, thirſt, and univerſal pains, with profuſe ſweating, were diſtreſſing, and he was coſtive. Pediluvio utitur.

8. No remiſſion, though he had ſeveral ſtools in the night; the ſweating ſtill continued, and was profuſe when he moved in bed. Cort. ʒi. ſecunda quaque hora atque vini pauxillum dedi. PM. he moaned, ſighed, often vomited, and purged, was apprehenſive of dying, but ſweated leſs. Anod. h. ſ. et veſicat. inter ſcap. admovi.

9. He

9. He paſſed an indifferent night from a continuation of the ſymptoms. AM. he craved ſmall beer at one time, and milk at another;—there was a ſlight hæmorrhage from the right noſtril. Cort. (10ma hora am. atque alum. gr. x.) ut heri, atque opij grß. vel gr. i. ut viſum præſcripſi. The diſcharge from the bliſter was a yellow ſerum.

11. The remiſſion of the fever was more diſtinct, but he complained as uſual of all the other ſymptoms. Cort. atque opium et vinum, ut 9no præſcripſi, et crem. tart. gr. xv. PM. he was entirely free of fever, and a little blood, quite cold, came from the right noſtril. He never had any return of the fever; however, he complained of the reaching, and of exacerbation of the pains for ſeveral days; therefore continued his medicines as on the 11th, only diminiſhing the number of doſes gradually, and inſtead of opium, the laſt two or three days of his illneſs, I ordered him ſp. C.C. gut. x. with every doſe of his medicine, and more wine.

TABLE I.

Shews the Number of Fever Patients on Board of the EDGAR, between July 1, 1779, and Auguſt 1, 1780;—the Number who died—and the Proportion of Deaths.

Fever Patients.	Died.
475	6
Beſides eight Priſoners who had the Fever on Board, and were not ſent to the Hoſpital.	But it is allowed, that the Bark failed in one Caſe only.—One died by drinking wine.—Two I ſaw twice only while they were ill.—Hemorrhage neglected by the Attendants, occaſioned the Death of one, and the other was almoſt dead before he complained.

The Proportion of 6 Deaths in 475 Perſons, however, is 1 in 79 1-6.

TABLE

TABLE II.

Shews the Number of Fever Patients admitted into Gibraltar Hoſpital between the 19th of Jan. and the 20th of April, 1780, from his Majeſty's Fleet, and of the Spaniſh Priſoners; the Number who died, and the Proportion of Deaths, under the Antimonial and Camphire Treatment.

Fever Patients admitted from the Fleet.	Died (beſides thoſe who were ſeized with Fever at the Hoſpital, and died)
570	57
Proportion of Deaths is 1 in 10.	

Priſoners.	Died (beſides two in the launches, and two immediately after they had landed, when they were going over to Spain.
437	33
Proportion of Deaths is 1 in 13 8-33.	

The method of treatment was with antimonials, camphire, and nitre.

TABLE

TABLE III.

The different Diſeaſes, the Number of Patients of each Diſeaſe, the Number who were ſent ſick from, and the Number who died of each Diſeaſe, on Board of his Majeſty's Ship Edgar, from June 1, to November 30, 1781; during which Time the ſaid Ship was chiefly employed at Sea on Channel Service, and was docked.

Diseases.	June.	July.	Aug.	Sept.	Octob.	Nov.
Fever	22	12	7	14	13	29
Pleuriſy						1
Pain of the Breaſt						1
Pain of the Side		2				
Dyſentery				1		
Belly-ach		1		5	1	1
Diarrhæa		1			1	
Reaching		1				
Indigeſtion		1		1		
Obſtruction of the Abdominal Viſc.			1			
Scurvy	2	1	1	2	1	2
Rheumatiſm	2			1	3	3
Head-ach	3	3	3	1	3	1
Cough	1			1	1	
Sore Throat	2	3				1
Epilepſy	1		1			1
Ophthalmia	3	1		1	2	
Tooth-ach				1		1
Nephritis		1			1	1

TABLE III. CONTINUED.

Diseases.	June.	July.	Aug.	Sept.	Oct.	Nov.
Plethora			1			
Hæmorrhoides	2					
Eruption				3		1
Scald	1	1			1	
Contuſion	13	5	2	7	3	11
Concuſſion of the Brain				1		
Strain	3	2		1	3	1
Fracture				1		
Excoriation	1		1			1
White Swelling		1				
Wound	1		3	2	2	
Inflammation	1			1		
Diſeaſed Teſticle	1					
Furuncle	1	1	2		2	
Abſceſs					1	
Fiſtula in Ano						1
Cancered Lip	1					
Ulcer	1	1	2	2	1	2
Accident			1			
No. of Patients.	62	38	25	46	39	59
No. of Deaths			1			
No. of Patients ſent to Hoſpitals	4	15				29

TABLE IV.

Continuation of the preceding TABLE, from DEC. 1781, until MAY, 1782.

DISEASES.	Dec.	Jan.	Feb.	March.	April.	May.
Fever	23	24	17	15	18	3
Peripneumony			1			
Pleuriſy			1			
Pain of the Breaſt	1	4	1			
Pain of the Side		1			3	
Pain of the Stom.					1	
Dyſentery		1				
Belly-ach					1	
Rheumatiſm	2		2	2		1
Head-ach	1				2	
Cough	4	1		1	6	
Sore Throat	3	2	1	3		
Epilepſy		1				
Ophthalmia					2	
Blindneſs					1	
Nephritis		1			1	
Suppreſ. of Urine				1		
Hemorrhoides		1			2	
Eruption	1	1	1	1		
Itch	1		2	12	80	
Scald	3		1	4		2

TABLE

TABLE IV. CONTINUED.

Diseases.	Dec.	Jan.	Feb.	March.	April.	May.
Contuſion	9	7	7	1	14	2
Strain	2		1	4	1	
Fracture		1		1		
Wound		4	8	4	2	
Inflammation	3	1	2	1	1	
Ulcer		1	2	2	3	1
Drowned					1	
No. of Patients	53	51	47	52	139	9
No. of Deaths					1	
No. of Patients ſent to Hoſpitals	4	6	4	3	9	3

TABLE V.

Shewing the Event of the particular Diſeaſes.

Diseases.	Number.	Number ſent to Hoſpitals.	Deaths on Board.
Fever	197		33*
Peripneumony	1		
Pleuriſy	2		
Pain of the Breaſt	7		
Pain of the Side	6		
Pain of the Stom.	1		
Dyſentery	2		
Belly-ach	9		
Diarrhœa	2		
Reaching	1		
Indigeſtion	2		
Obſtruction of the abdominal Viſc.	1		1
Scurvy	9		2
Rheumatiſm	16		9
Head-ach	17		2
Cough	15		5
Sore Throat	15		
Epilepſy	4		
Ophthalmia	9		
Blindneſs	1		1
Tooth-ach	2		
Nephritis	5		
Plethora	1		
Suppreſ. of Urine	1		

* Nineteen of thoſe came from a cartel, a ſickly ſhip ; and another from the hoſpital, ſick of the fever.

TABLE V. CONTINUED.

Diseases.	Number.	Number ſent to Hoſpitals.	Deaths on Board.
Hemorrhoides	5		
Eruptions	8		
Itch	95		
Scald	13		
Contuſion	81		5
Concuſſion of Brai	1		1
Strain	18		
Fracture	1		1
White Swelling	3		1
Excoriation	3		
Wound	26		
Inflammation	10		
Diſeaſed Teſticle	1		
Furuncle	6		
Abſceſs	1		
Fiſtula in Ano	1		1
Cancered Lip	1		1
Ulcer	18		12
Accidents	1	1	
Drowned	1	1	
Whole Number	620*	2‡	76†

* Beſides venereal patients (one of whom was ſent to the hoſpital) and ſlight complaints.

‡ One, a boy, died of an accident, and the other fell overboard in bad weather.

† Beſides 19 of them being cartel men, ſeveral were ſent twice for the ſame complaint.

TABLE VI.

The different Diſeaſes, the Number of Patients of each Diſeaſe, which occurred on Board of his Majeſty's Ship the Edgar, between July 1, 1778, and Auguſt 1, 1780.

Diseases.	July.	Aug.	Sept.	Octob.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	No. of Patient	Deaths	ſent to H.	with Fev.
Fever	1	5	29	59	61	36	28	30	46	49	35	40	56	475	6	28	28
Meaſles				3	4	2								9	1		
Eryſipelas							1							1		1	
Dyſentery		1	1					1	1	6	1			11			
Belly-ach		1	2	1	2	1	2		1		1			11			
Diarrhæa		2		1	1				1					5		2	
Worms								1						1			
Indigeſtion				1										1			
Scurvy		6		2	3	3			8	8	16	3	12	61		2	
Rheumatiſm	1		1	4	8	10	5		1	5	4	2	1	42			
Gout			1											1	1		
Scrophula								3						3		2	
Head-ach		1	1	16		1	1							20			
Cough			3	11	1	9	2	2		1		2		31		6	
Sore Throat		1		1		11	1					1		15			
Hemorrhage				1										1			
Hemoptyſis			1											1			
Conſumption			1											1			
Ear-ach							1		1					2			
Giddineſs		1											1	2			
Epilepſy			1	1			2	1	1					6			
Apoplexy							1							1		1	
Mania					1									1		1	
Ophthalmia					2	1		2		1	1			7			
Blindneſs				1	1									2		2	
Nephritis			1	1			1				1		1	5		1	
Hemorrhoides			1											1			
Old Age						1								1		1	
Eruption			1	1		1	1	2	1	4	1			10		1	

TABLE VI. CONTINUED.

Diseases.	July.	August	Sept.	Octob.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	No. of Patient	Deaths	sent to H.	withFev.
Itch				3	14	5					1			23			
Scald		1	1		5		1	3	1		1			13			
Strain		1	2	2	4	3		3	2	2	2	1	3	25		1	
Rupture	1	1	1		1	4		1						9		2	
Contuſion		6	10	15	7	9	6	14	13	4	8	3	6	101		2	
Diſlocation						1								1			
Fracture		1	2		1	3		2		1			1	11		5	
Excoriation							1	1	2					4			
Wound	1	1		5	5	3	20	3	10	1	2		1	52		7	
Inflammation		2	2	2	1	4	1		1	1		1	1	16		1	
Furuncle				2	1		2	2	2					9			
Abſceſs				1	2			1	3	1		1		9			
Ulcer				6	3		3	6	3	4	2	2		29		3	
Accident													2	2	2		
No. of Patients.	4	31	62	140	128	10	80	78	99	85	76	56	85	1032			
No. of Deaths					2						3	3	2		10		
No. of Patients ſent to Hoſpitals	3	4	1	5	6	12	10	21	7	2	2	4				77	
No. of ditto ſent for fevers	1		1	1	2	4		10	2	2	2	1					28

Of the 77 who were ſent to the Hoſpital, 11 were Spaniſh and Engliſh priſoners, 5 were invalids, 5 were ſent by ſurvey, and 4 were convaleſcents.

Of the 28 ſent with fevers, 11 were Spaniſh and Engliſh priſoners, and 4 were convaleſcents.

TABLE VII.

Shows the Proportion of Deaths of Fever Patients on Board of his Majeſty's Ship Edgar, from June 1, 1781, and May 7, 1782, the Day on which I was ſuperſeded, excluſive of 19 men from a cartel, who were ſent to the Hoſpital as ſoon as poſſible after they complained; and the Man who came from the Hoſpital ill, and was ſent back the next Day, under Treatment of the Bark.

Number of Deaths.	died.
177	None.
Proportion of Deaths in 177	None died.

Of the 177, 13 were ſent to hoſpitals, but 4 of the 13 were ſent when the ſhip was in dock, becauſe they could not be conveniently taken care of, on board of the hulk; and of the remaining 9, moſt of them were ſent when we were going to ſea, as it would be judged imprudent to ſail with the ſick.

CON-

CONCLUSION.

FROM long experience, I hope I may be permitted to repeat, that I have never, in any one caſe of ſhip fever, on board of the Edgar, diſcovered petechiæ, though diligent ſearch has been made for them. Could this proceed from any other cauſe than the method of treatment with the bark?

I can further ſay, that in no ſituation whatever, either from obſervation or enquiry, have I found the ſhip fever to be very fatal, or ſo highly contagious as to put the ſhip paſt ſervice, but on board of ſuch ſhips as Dr. James's powder, tartar emetic, or the antiphlogiſtic methods were followed. This is not meant as any reflection on the ſurgeons of ſuch ſhips;—it can be none—becauſe thoſe methods are the general practice throughout the kingdom; and it is only mentioned to lament that a practice ſo deſtructive, ſhould hitherto have been ſo univerſal.

Beſides the proofs already adduced to confirm the poſitions ſtated in the Introduction, many more (were it not for ſwelling the volume) might

might have been added from my own obſervations, ſince the manuſcript was ſent to the printer in Auguſt, 1780. One in particular, the ſurgeon of the 2d battalion of the 73d regiment, obligingly furniſhed me with in 1781. I might greatly enlarge upon it, as it is, *ad rem*, almoſt in every circumſtance; but ſince to ſuch proofs however valid or pertinent in themſelves, it may be objected, that they did not fall under the author's obſervations, I purpoſe decline inſerting it. To the ſame objection, ſhould it ſtill be made to the few ſuch proofs I have inſerted, may I be allowed to anſwer, that, as few practitioners in phyſic will have ſo many caſes come under their care, as the preceding obſervations are founded on; and conſequently as few readers will ever have, experimentally, authority to deny the validity of them; I hope thoſe who are under ſuch a predicament, will not be more raſh to condemn or reject upon hear-ſay, than I have been to impoſe the obſervations of others for my own.

In a word, I have no more doubt than of my own exiſtence, that every practitioner will be convinced of the truth of thoſe Obſervations on the Ship Fever, if they will take the proper ſteps to be convinced:—that is, if diveſting themſelves of prejudice, they will make a conſcientious trial of treating the ſhip fever with bark,

bark, as I have done, and compare the event, with that of treating it in all the other methods which have been hitherto adopted—And in making this trial, it muſt be an invariable rule *To give the bark liberally and early—ſo early, as in a manner to prevent the fever.*

I wiſh not to diſcourage others from promoting the benefit of the ſervice—I only do myſelf juſtice, by declaring, that after having ſerved the public upwards of twenty-one years, and ruined a good conſtitution, by frequent attacks of ſickneſs, incurred by attending my duty in various climates, my circumſtances are worſe than when I firſt entered into the ſervice; and that my only recompence for the irretrievable loſs of thoſe bleſſings, is the reflection that I have been inſtrumental, under Providence, in preſerving many lives which, in human probability, would have fallen victims to a contrary practice—a recompenſe that, were it poſſible, would be too cheaply bartered for any thing in the power of man to beſtow.

When the unprejudiced reader, who is acquainted with the writings of thoſe phyſicians, who have ſtrongly inculcated their apprehenſion of inevitable danger, from an early adminiſtration of the bark in fever, ſhall ſeriouſly conſider

the hiſtorical facts we have gone through, in the preceding Obſervations, is it not more than probable he will conclude—" That many of thoſe gentlemen, have adopted the idea of the danger, which is to enſue from that practice, on the authority of others who have gone before them ?" May he not be led to this concluſion, by reflecting, " that ſurely if bark, in the naval practice, where men are more intemperate, and labour under greater diſadvantages, from their ſituation, when ſick, than people on ſhore, is found not only innocent, but effectual when given in the beginning of fevers, even without any previous evacuation; and if it ſo far excels other methods of cure, as has been demonſtrated by numerical calculations, the practice ought to be fairly tried on ſhore." If refuſing, indignantly, to liſten to reaſon on the moſt trivial ſubject, be thought illiberal—how are we to judge of thoſe who diſregard the moſt important facts, even when they relate to a moſt intereſting ſubject ?

Suppoſing, however, that the advocates for different management, ſhould retort our own words reſpecting bark—" That ſome die, becauſe they had not taken a ſufficient quantity of *their* medicines to cure them ;"—ſhould we grant their poſition, the iſſue of the argument will ſtill

ſtill be, that for one patient under the bark management, fifteen have died under other methods of treatment.—We therefore cannot entertain a doubt, that bark will be uniformly found ſuperior to all other remedies. The different events, therefore, render the various methods of treating the ſhip fever a very intereſting ſubject, particularly to government; becauſe, though the faculty on ſhore, ſhould, from repeated facts of this nature, adopt the bark method of managing fevers, the pay and perquiſites of thoſe who are employed in the navy, will never, while they are on the preſent eſtabliſhment, permit them to put it in practice. The conſequence is obvious.

The ſubject thus fairly ſtated becomes ſo delicate, that a perſon in publick ſervice cannot proſecute it, more particularly, after what we have already demonſtrated in the phyſical journal, and in the fourth table.—We therefore leave the matter, important as it is, before thoſe who have the power to remedy it—and truſt, they have inclination to put their power in force.

But to conclude. It is hoped we have now proved the poſitions laid down in the introduction, namely, "That infection often rages amongſt us, unheeded and unſuſpected."—"That infection may be diſtinguiſhed by the

diurnal ſymptoms we have pointed out."— "That bark far excells all other remedies extolled for curing the ſhip fever."— "And that delaying to adminiſter bark early in fevers, has been attended with fatal effects to mankind." —For thoſe purpoſes irrefragable proofs were neceſſary, and we have adduced them, in a ſeries of facts collected from experience. To the candour of thoſe, who have, themſelves, had equal opportunities of comparing the ſucceſs of various methods of cure, we, with all humility, appeal. To their experience, clearly and fairly ſtated, we will readily ſubmit. 'Tis true we can neither boaſt of elegance of ſtyle; of energy of expreſſion; of well-turned periods; nor of learned quotations, qualities eſſentially neceſſary to form a good writer;—but, ſatisfied that we have ſtated facts, we will think ourſelves happy if we have conveyed our meaning intelligibly; and happier ſtill, if it ſhall be found that we have contributed to the preſervation of our fellow creatures, with the hopes of which we may reaſonably flatter ourſelves, unleſs we can be perſuaded that the *nature* of infection, and the *properties* of bark, ſhall hereafter entirely change.

POSTCRIPT.

Kingſton, near *Portſmouth*, Dec. 29, 1782.

The Author having accidentally met with Dr. *William Saunders's* pamphlet, entitled, "Obſervations on the ſuperior efficacy of the red Peruvian bark, in the cure of agues and other fevers, publiſhed for *J. Johnſon*, St. Paul's Church-yard, and *J. Murray*, in Fleet Street," on the 27th inſtant only, had not time, as he wiſhed, to write, upon the ſubject, to Dr. *Saunders*, for whom he has a very high regard, the preceding obſervations, being, then, very near printed, and the author expecting, every hour, to proceed on his voyage; the Doctor, though he ſhews—the uſe of bark in the cure of intermitting fevers, has taken no notice of ſeveral teſtimonies of its ineſtimable value in continual fevers, Dr. *Millar*'s works, who for various reaſons, merits the title of the Sydenham of the Age, the Phyſical Journal, publiſhed by the author in 1777, and particularly Dr. *Clark*'s book on Eaſt-India diſeaſes. He would recommend it to the Doctor to mention them in the next edition of his pamphlet, as they contain accounts of

of the moſt liberal, extenſive, and the *earlieſt* trials of bark in fevers, which have ever yet appeared before the publick. Theſe teſtimonies will rather promote than fruſtrate the Doctor's benevolent deſign;—beſides, 'tis a juſtice we owe to each other, as well as to mankind.

FINIS.

ERRATA.

Page 2 of the Contents, line 3, *for* Numbers *read* Number.

INTRODUCTION.

Page 2, line 4, *for* dea, *read* Idea.

4, in the note, *for* two, *read* three years—beſides other ſhips.

22 in the note *read* Chap. xlix. v. 6.

27 5, *dele* 7th.—line 7, *for* extoled, *read* extolled.

28 laſt, *for* produced, *read* failed to produce.

OBSERVATIONS.

11 3 and 4, *for* by a ſcurvy, *read* for ſcurvy.

58 10, *for* officers, *read* officer.

63 21, *for* harraſſing, and wherever it occurs, *r.* haraſſing.

64 3, *for* hammocs, and wherever it occurs, *r.* hammacoes.

79 19, *dele* had.

80 10, *for* of whom, *read* one of whom.

108 11, *for* in new, *read* for new.

112 in the note, *for* pages 71 and 72, *read* 85 and 86.

132 18 & 19, *for* Cannanictel, *read* Connecticut.

150 14, *for* chilneſs, or wherever chillneſs occurs, *r.* chillineſs.

169 11, *for* reaching, and wherever it occurs, *read* retching; and *for* belly-ache, *read* belly-ach.

189 5, *for* ſuperbibendo menthæ infuſionem, *read* ſuperbibenda menthæ infuſione.

192 16, *for* 24 *read* 14.

210 2, *for* birth, *read* berth.

212 17, *for* ſweat, *read* ſweated.

215 19, *dele* repeated.

222 19, *for* admoui, *read* admovi.

223 26, *for* fuerent *read* fuerunt.

237 2, *read* Part III.

17, *for* to the 31ſt July, 1780, *read* 7th May, 1782.

251 14, *for* ſodorific, *read* ſudorific.

257 17, *for* febriſage *read* febrifuge.

288 10, *for* thæ, *read* theæ.

299 after Caſe XXX. for the third head, ſee the caſes which terminated fatally, p. 263; and for the inferences, ſee the Concluſion.

312 10, *for* purpoſe *read* purpoſely.

313 10, *for* twenty-one, *read* twenty-three.

ERRATA OF THE TABLES.

In Table IV. page 145, is omitted the Column which was to ſhow the number who died at hoſpitals.

Part II. ought to have ended with Table III. page 229.

Table VI. of Part III. ought to have been where Table I. is, and Table I. and II. to have been II. and III.

Table IV. V. and VI. of Part II. ought to have followed Table III. in Part III. and for *Juno* ought to have been *Edgar*, and the title of Table VI. ſhould be—'ſhewing, &c. Diſeaſes in the two preceeding Tables:'—and the title of Table VII. ſhould have been,—'Shows, &c. Death in the three preceding Tables,' and to be Table VII. in Part III.

Table III. page 302, ought to be Table VIII.

Table IV. page 304, ought to be Table IX.

Table V. page 306, ought to be Table X. and to have been entitled —'Shewing, &c. Diſeaſes in the two preceding Tables.' The titles of the two right-hand columns of this table, are miſplaced —'Deaths on board'—ought to have been—'Numbers ſent to Hoſpitals;'—and *vice verſa*.

Table VII. page 310, ought to be entitled, Table XI.; the left-hand column of which ought to be entitled Number of *Patients* —inſtead of *Deaths*.